

### **Division of Facilities Construction and**

### Request for Proposals for Design/Build Services Stage II

Value Based Selection Method

June 25, 2007

## **DLD/DMV JOINT FACILITY**

# DEPARTMENT OF PUBLIC SAFETY DRAPER, UTAH

DFCM Project No. 07037550

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Fairpark Map

(Performance Specifications, etc).

Stage I of the Design/Build RFP is incorporated by reference. The requirements and results of Stage I are also made a part of Stage II.

Current copies of the following documents are hereby made part of this Request for Proposals for Design/Build Services. These documents are available on the DFCM web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a> or are available upon request from DFCM.

DFCM Design Manual dated March 15, 2006

DFCM General Conditions dated May 25, 2005

DFCM Application and Certificate for Payment dated May 25, 2005

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at http://dfcm.utah.gov

#### INVITATION TO SUBMIT PROPOSALS

### ONLY DESIGN/BUILD TEAMS PREVIOUSLY SHORT-LISTED DURING STAGE I ARE ALLOWED TO SUBMIT ON THIS PROJECT

The State of Utah - Division of Facilities Construction and Management (DFCM) intends to hire a Design/Build Team comprised of a General Contractor supported by subcontractors and an A/E with supporting technical consultants to design and construct the following project:

#### <u>DLD/DMV JOINT FACILITY</u> <u>DEPARTMENT OF PUBLIC SAFETY – DRAPER, UTAH</u> DFCM PROJECT NO. 07037550

The project estimated cost is \$4,650,000. This design/build project will include a 20,000 gsf office building including customer service areas, offices, and various support areas. Project also includes about 400 parking spaces, drive thru facilities, and a commercial driver license/motorcycle test range.

A **MANDATORY** pre-proposal site meeting will be held at 3:00 PM on Monday, June 25, 2007 in Room 109 of the Corrections Administration Building, 14717 South Minuteman Drive, Draper Utah. All short listed Contractors and Architects wishing to bid on this project must attend this meeting. At this meeting, CDs containing the Stage II RFP documents will be distributed. For questions regarding this project, please contact Dave McKay, Project Manager, DFCM, at (801)-541-9019. No others are to be contacted regarding this project.

The proposal documents that are requested in the RFP must be submitted to DFCM at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah by the dates and times shown in the Project Schedule.

A bid bond in the amount of five percent (5%) of the proposal amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the proposal.

The Division of Facilities Construction & Management reserves the right to reject any or all proposals or to waive any formality or technicality in any bid in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT Marla Workman, Contract Coordinator 4110 State Office Bldg., Salt Lake City, Utah 84114

#### ADDITIONAL PROJECT DESCRIPTION

The DLD/DMV Joint Facility is a 20,000 gsf customer service facility for southern Salt Lake County and northern Utah County. The construction project estimated cost is \$4,650,000. This facility will be the largest customer service facility for either the Driver License Division or the Department of Motor Vehicles. The facility will include parking for over 400 vehicles, drive thru service and a commercial driver license/motorcycle test range in addition to the customer service counters and service support functions. Project must conform with DFCM's High Performance Building Standard. Project must include the completion of a UDOT conforming intersection updating the Sivogah Court connection to Minuteman Drive similar to the example shown in the appendix from Draper City.

The Facility Program prepared by Harris and Associates, in collaboration with DLD and DMV personnel, is part of the project requirements. It contains a space list, affinity diagram, individual space criteria, and related details and material critical to the successful execution of the project. The appendices to this facility program, including the geotechnical report and ALTA survey, are also made part of the project.

#### **Project Risk Factors**

- Understanding the facility program
- Understanding the users priorities
- Dealing with the sloping site
- Dealing with property easements, utilities, and various governing bodies
- Dealing with DFCM requirements

DFCM Form 5b-1 062107 4

#### PROCUREMENT PROCESS

In addition to the procurement process requirements outlined in the Stage I RFP documents and addenda, the following procedures and requirements will apply to the final selection of the Design/Build Team offering the best value to the State.

#### Stage II

Following the selection of finalists, each design/build team may access a Stage II RFP with requirements, schedules, guidelines, facility program, ALTA survey, geotechnical report, and other specific project information on the DFCM website under this specific project. DFCM documents; General Conditions, Design Requirements, Design/Build Team Agreement, High Performance Building Standard, etc., may also be accessed on the DFCM website under 'Standard Documents'.

DFCM has scheduled two Pre-proposal Meetings with the users and each finalist design/build team. The first meeting, generally, will be to familiarize the design/build teams with the users, their requirements and concerns, and allow the design/build teams to ask more specific questions of the user and DFCM. The second meeting, generally, will be to preview design/s and design options of each design/build team. This will allow the design/build teams to gauge various reactions from the users.

In addition to the procurement process requirements outlined in the Stage I RFP documents and addenda, the following procedures and requirements will apply to the final selection of the Design/Build Team offering the best value to the State.

#### 1. Pre-Proposal Meetings

Friday, June 29, 2007 10:00 AM – 12:00 Noon 1:00 PM – 3:00 PM 3:00 PM – 5:00 PM	Team A Team B Team C	Location:	DLD Conference Room Calvin Rampton Complex 4501 South 2700 West Salt Lake City, Utah
Friday, July 13, 2007 10:00AM – 12:00 Noon 1:00 PM – 3:00 PM 3:00 PM – 5:00 PM	Team C Team A Team B	Location:	Conference Room 1050 State Tax Commission Building 1950 West 210 North Salt Lake City, Utah

#### 2. <u>Last Day to Submit Questions</u>

All questions must be received at the office of DFCM no later than the date and time listed on the Project Schedule. Questions must be submitted in writing to Dave McKay at DFCM.

DFCM Form 5b-1 062107 5

#### 3. Time

One of the selection criteria will be proposed contract time. The Design/Build Team will include in the management plan the schedule for completing the work including any items required by DFCM or the agency. A completion date prior to July 1, 2008 is requested but not mandatory.

It is anticipated that a contract will be given to the contractor for signature within 14 days of the selection announcement. This time will be used to negotiate the final contract and must be allowed for in the team's proposed schedule. The actual notice to proceed will be based on how quickly the contractor returns the contract and the required bonds. The actual completion date will be based on the contractors proposed schedule and the date the contractor received the contract for signature.

All plans, schedules, and the cost proposals are required to reflect the project design and construction time. Non-compliance with the schedule will not result in automatic disqualification; it will be evaluated by the Selection Committee in determining the final selection.

#### 4. <u>Design Proposal</u>

The following is a list of all items to be submitted by the Design Proposal due date:

- Presentation Boards (one of each required drawing). Each board will be 24" x 36".
- Required Drawings (six sets). Each drawing sheet will be sized sufficient to demonstrate the detail of the drawings.
  - o Site Drawing, including but not limited to:
    - Plan showing all site development: building footprints and floor elevations, roads, parking, drainage Scale 1"=50'-0" (minimum).
    - Circulation showing entries, exists, service access, site fire access lane, pedestrian paths, building entries, Scale 1"=50'-0" (minimum).
    - Landscaping, Scale 1"=50'-0" (minimum).
  - o Floor Plans for each floor of the building(s), Scale 1/8"=1'-0" (minimum).
  - o Elevations, including but not limited to:
    - All four elevations of the building(s), Scale 1/8"=1'-0" (minimum).
    - Unique elevations of other sections of the building(s), Scale 1/8"=1'-0" (minimum).
  - o Transverse and longitudinal sections, Scale 1/8"=1'-0" (minimum).
  - o Details as required to show design approach, and to demonstrate quality.
  - o One perspective view drawing
- Complete outline specifications (six sets)
- Adequate narrative description of each system (electrical, mechanical, plumbing, structural, security, etc. (six sets)
- A complete list of exclusions or exceptions from requirements listed in the requirements of the projects.

#### 5. Final Management Plan

The Design/Build Team shall submit seven copies of a Final Management Plan by the time indicated on the Project Schedule. The Final Management Plan is an update and refinement of the Preliminary Management Plan. It should demonstrate how the Design/Build Team is organized, the role of team members, and how the team will work together to achieve the objectives of the project. It should identify decision making authority and point of contact.

The Final Management Plan should address how the Team will accomplish the objectives of the project, mitigate the project risks that are noted in the RFP as well as others identified by the Team, and address any other selection criteria not addressed elsewhere in the Team's submittals. It should include information on how the construction will be managed and address items such as security and safety controls, staging areas, delivery routes, crane locations, and interfaces required at the site with the using agency or institution. A project schedule should be included indicating how the Team will accomplish the desired completion timeframe.

The Final Management Plan should be concise yet contain sufficient information for evaluation by the Selection Committee.

#### 6. <u>Updated Statements of Qualifications</u>

The Design/Build Team shall provide seven copies of the statements of qualification. The updated statement of qualifications is only required if there are any new members or change in members of the design build team. The format should follow that in Stage I.

#### 7. <u>Cost Proposal</u>

Cost Proposals are required to be within the stated design/build budget of \$4,650,000. Before submitting a proposal, each Design/Build Team shall carefully examine the RFP, visit the site of the Work, fully inform themselves as to all existing conditions and limitations, and shall include in the Cost Proposal the cost of all items required by the RFP. The Team is responsible for complying with all applicable laws, building codes, rules and regulations.

The Cost Proposal, bearing original signatures, must be typed or handwritten in ink on the cost proposal form provided in the RFP and submitted in a sealed envelope at the location specified below prior to the deadline for submission of cost proposals indicated on the Project Schedule.

Procurement Process Page No. 4

Bid bond security, in the amount of five percent (5%) of the proposal amount, made payable to the Division of Facilities Construction and Management, shall accompany the Cost Proposal. THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE PROPOSAL.

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the contractor will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. NOTE: A cashier's check cannot be used as a substitute for a bid bond.

Due to the ongoing construction on Capitol Hill and the anticipated shortage of parking during 2007, Cost Proposals will be accepted by DFCM at the Wasatch Building at the Utah State Fairpark. Refer to the map on the DFCM web site for directions <a href="http://dfcm.utah.gov/downloads/fairpark\_map.pdf">http://dfcm.utah.gov/downloads/fairpark\_map.pdf</a>). Late proposals will be disqualified and returned to the proposer unopened. One copy of the cost proposal is required.

#### 8. Cost and Scope Adjustment Proposals

Design/Build Teams may submit Cost and Scope Adjustment Proposals with the Final Management Plan. Sufficient description of the adjustment as well as the impact on the Cost Proposal must be provided to allow for evaluation by the Selection Committee of the impact on scope, functionality, durability, long term cost efficiency and initial cost. The amount shown on the base Cost Proposal should not include the impact of the Cost and Scope Adjustment Proposals. The Cost and Scope Adjustment Proposals will be evaluated by DFCM and the user to determine if they are potentially acceptable. Prior to the interviews, each contractor will be notified as to which of their Cost or Scope Adjustment Proposals are determined to be potentially acceptable and which ones will not be considered in the selection process. Only those Cost and Scope Adjustment Proposals that are determined to be potentially acceptable may be presented in the interview. Design/Build Teams may not submit additional Cost and Scope Adjustment Proposals after the deadline. Any new Cost and Scope Adjustment Proposal that is raised in the interview process that was not submitted prior to the deadline will not be considered in the selection process. The Cost and Scope Adjustment Proposals that are accepted will be included in the original contract.

#### 9. <u>Interviews</u>

Interviews will be conducted with each of the finalist Design/Build Teams in which they may present their proposed design, Final Management Plan, Cost and Scope Adjustment Proposals, and schedule. The interview will also provide an opportunity for the Selection Committee to seek clarification of the Design/Build Team's proposal.

The proposed primary project management personnel, including the project manager and architect, should be in attendance. The project manager is the Design/Build Team's representative who will have full responsibility for the design and construction of the project. The project manager has overall job authority, will be in attendance at all job meetings, and is authorized by the contractor to sign any and all change orders in the field, if necessary. Unless otherwise noted, attendance of subconsultants and subcontractors is at the discretion of the Design/Build Team.

The method of presentation is at the discretion of the Design/Build Team. The interviews will be held on the date and at the place specified in the Project Schedule.

#### 10. <u>Selection Criteria</u>

The following criteria will be used in ranking each of the Design/Build Teams. The team that is ranked the highest will represent the best value for the state. The criteria are not listed in any priority order. The Selection Committee will consider all criteria in performing a comprehensive evaluation of the proposal. Weights have been assigned to each criteria in the form of points.

- A <u>Design Proposal</u>. **30 POINTS.** The Design/Build Team's design as presented in the drawings and specifications and as clarified in the interviews will be evaluated as to how well it meets the objectives of the project.
- B. <u>Schedule</u>. **15 POINTS.** The schedule will be evaluated as to how well it meets the objectives of the project. Unless other objectives are stated, the shorter the design and construction duration that is evaluated to be feasible while maintaining safety and quality in conformance with the RFP is preferred. The team shall discuss during the interview the project schedule identifying major work items with start and stop dates that are realistic and critical subconsultants and subcontractors and if they have reviewed and agree to the schedule. The overall completion date shown on the schedule will be used in the contract as the contract completion date.
- C. <u>DFCM Past Performance Rating.</u> **10 POINTS.** The lead construction firm and design firm for each Design/Build Team will be given a past performance rating. The rating will be based first on how well the team members did on past projects with DFCM. If a minimum of three DFCM past performance ratings are not available, a rating will be established using any DFCM past performance ratings that are available, supplemented by references supplied by the Design/Build Teams at the time the Statement of Qualifications and Organization is submitted.

- D. <u>Strength of Team.</u> **10 POINTS.** Based on the Statements of Qualifications. Final Management Plan, and the interview, the Selection Committee shall evaluate the expertise and experience of the team and the project lead as it relates to this project in size, complexity, quality, duration, etc. Consideration will also be given to the strength brought to the team by critical consultants/ subcontractors including how they were or will be selected and the success the team has had in the past in similar projects. The Selection Committee will also evaluate how the members of the Design/Build Team will work together to achieve project objectives. This will include any experience the team members have in working together.
- E. <u>Project Management Approach</u>. **10 POINTS.** Based on the information provided in the Final Management Plan and information presented in the interview, the selection team will evaluate how each team plans to design and construct the project in the location and time frames presented. The Selection Committee will also evaluate the degree to which risks to the success of the project have been identified and a reasonable solution has been presented. This will include how the Team proposes to keep the site safe and minimize disruption while moving material and people into and out of the site.
- F. <u>Cost</u>. **25 POINTS.** The team's proposal will be considered with all other criteria to determine the ranking of the firm. This may include consideration of any cost and scope adjustment proposals.

TOTAL POSSIBLE POINTS: 100 POINTS.





#### **Division of Facilities Construction and**

#### PROJECT SCHEDULE

PROJECT NAME:		JOINT FACILIT		D/B Stage II
DFCM PROJECT NO.	07037550	IENT OF PUBLIC	SAFETY – DI	KAPEK, UTAH
Event	Day	Date	Time	Place
Mandatory Pre-Proposal Site Meeting - Request for Proposals Documents will be distributed on CDs	Monday	June 25, 2007	3:00 PM	Conference Room 109 Corrections Administration Bldg 14717 South Minuteman Drive Draper, UT
Visits with DFCM/Users	Friday	June 29, 2007	10:00 AM – 5:00 PM	DLD Conference Room Calvin Rampton Complex 4501 South 2700 West Salt Lake City, UT
	Friday	July 13, 2007	10:00 AM – 5:00 PM	Conference Room 1050 State Tax Commission Building 1950 West 210 North Salt Lake City, Utah
Last Day to Submit Questions	Monday	July 16, 2007	12:00 NOON	Dave McKay – DFCM E-mail dmckay@utah.gov Fax (801)-538-3267
Addendum Issued (exception for bid delay)	Thursday	July 19, 2007	12:00 NOON	DFCM web site *
Prime Contractors Turn In Cost Proposals and Designs Statements of Qualifications and Management Plans Due	Thursday	July 26, 2007	12:00 NOON	Wasatch Building Utah State Fairpark Approx 155 North 1000 West Salt Lake City, UT**
Subcontractor List Due	Friday	July 27, 2007	12:00 NOON	DFCM 4110 State Office Bldg SLC, UT Fax (801)-538-3677
Interviews	Friday	August 3, 2007	8:30 AM	DFCM 4110 State Office Bldg SLC, UT
Announcement	Friday	August 3, 2007	5:00 PM	DFCM web site *
Substantial Completion Date	Tuesday	July 1, 2008		

<sup>\*</sup> DFCM's web site address is <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>.

<sup>\*\*</sup> Due to the ongoing construction on Capitol Hill and the anticipated shortage of parking during 2007, all required submittals will be received at the Wasatch Building at the Utah State Fairpark. Refer to the map on the DFCM web site for directions (<a href="http://dfcm.utah.gov/downloads/fairpark\_map.pdf">http://dfcm.utah.gov/downloads/fairpark\_map.pdf</a>).



### **Division of Facilities Construction and Management**

**DFCM** 

### **COST PROPOSAL FORM**

NAME OF PROPOSER \_\_\_\_\_\_ DATE \_\_\_\_\_

To the Division of Facilities Construction and Management 4110 State Office Building Salt Lake City, Utah 84114
The undersigned, responsive to the "Notice to Design/Build Teams" and in accordance with the "Request for Proposals" for the <a href="DLD/DMV JOINT FACILITY - DEPARTMENT OF PUBLIC SAFETY - DRAPER, UTAH - DFCM PROJECT NO. 07037550">DRAPER, UTAH - DFCM PROJECT NO. 07037550</a> and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:
I/We acknowledge receipt of the following Addenda:
For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:
DOLLARS (\$)
(In case of discrepancy, written amount shall govern)
I/We guarantee that the Work will be Substantially Complete by <b>July 1, 2008,</b> should I/we be the successful proposer, and agree to pay liquidated damages in the amount of <b>\$1,000.00</b> per day for each day after expiration of the Contract Time as stated in Section 4.2 of the Design/Build Agreement.
This bid shall be good for 45 days after bid opening.
Enclosed is a 5% bid bond, as required, in the sum of
The undersigned Contractor's License Number for Utah is

#### PROPOSAL FORM PAGE NO. 2

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:		
(Corporation, Partnership, Individual	, etc.)	
Any request and information related	to Utah Preference Laws:	
	Respectfully submitted,	
	Name of Proposer	
	ADDRESS:	
	Authorized Signature	

**BID BOND** (Title 63, Chapter 56, U. C. A. 1953, as Amended)

#### KNOW ALL PERSONS BY THESE PRESENTS:

tne "Principal," and		hereinafter referred to as
under the laws of the State of with its	s principal offi	, a corporation organized and existing ce in the City of and authorized to transact (0, Companies Holding Certificates of Authority as Acceptable
business in this State and U. S. Department of the Treasury Liste	ed, (Circular 57	0, Companies Holding Certificates of Authority as Acceptable
Securities on Federal Bonds and as Acceptable Reinsuring Com	panies); herein	after referred to as the "Surety," are held and firmly bound unto
the STATE OF UTAH, hereinafter referred to as the "Obliged accompanying bid), being the sum of this Bond to which p	e," in the amou	int of \$ (5% of the
administrators, successors and assigns, jointly and severally, f	irmly by these	presents.
THE CONDITION OF THIS OBLIGATION IS S	SUCH that whe	reas the Principal has submitted to Obligee the accompanying
THE CONDITION OF THIS OBLIGATION IS S bid incorporated by reference herein, dated as shown, to enter in	ito a contract in	writing for the Project.
NOW THEREFORE THE CONDITION OF T	HE ADOVE	DI ICATION IS SUCIL that if the said mineral does not
execute a contract and give bond to be approved by the Obligee in writing of such contract to the principal, then the sum of the damages and not as a penalty; if the said principal shall execute performance thereof within ten (10) days after being notified in void. It is expressly understood and agreed that the liability of penal sum of this Bond. The Surety, for value received, hereby for a term of sixty (60) days from actual date of the bid opening	e for the faithfu he amount stat ute a contract a writing of such the Surety for a y stipulates and	ted above will be forfeited to the State of Utah as liquidated and give bond to be approved by the Obligee for the faithful a contract to the Principal, then this obligation shall be null and any and all defaults of the Principal hereunder shall be the full
<b>PROVIDED, HOWEVER,</b> that this Bond is execute as amended, and all liabilities on this Bond shall be determined length herein.	ed pursuant to ped in accordance	provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, we with said provisions to same extent as if it were copied at
IN WITNESS WHEREOF, the above bounden partibelow, the name and corporate seal of each corporate party representative, pursuant to authority of its governing body.	es have execute being hereto	ed this instrument under their several seals on the date indicated affixed and these presents duly signed by its undersigned
DATED this day of	, 20	<u> </u>
Principal's name and address (if other than a corporation)	, <b>.</b>	Principal's name and address (if a corporation):
2 1 morphi o minio una unaresso (12 omer mini u corporation)	•	2 2 mospan s manie and address (if a corporation).
By:		Ву:
Title:		Title:(Affix Corporate Seal)
		(Affix Corporate Seal)
		Surety's name and address:
		Surety's name and address:
CTTATTE OF		Surety's name and address:
STATE OF)		
STATE OF) ss.  COUNTY OF)		By:
COUNTY OF) ss.	ally appeared b	By:
) ss.	Company, and coming sole su	By:
On this day of, 20, persona whose identity is personally known to me or proved to me on t that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of	Company, and coming sole suggested	By:
On this day of, 20, personal whose identity is personally known to me or proved to me on that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of My Commission Expires:	Company, and coming sole suggested	By:
On this day of, 20, personally whose identity is personally known to me or proved to me on that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of My Commission Expires: Resides at:	Company, and coming sole suggested	By:
On this day of, 20, personal whose identity is personally known to me or proved to me on that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of My Commission Expires: Resides at: Agency:	Company, and Company, and Coming sole sure.	By:
On this day of, 20, personal whose identity is personally known to me or proved to me on that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of My Commission Expires: Resides at: Agent: Address: Address: Address: Agent: Address: Address: Agent: Address: Agent: Address: Agent: Address: Agent: Address: Agent: Address: Address: Agent:	Company, and coming sole sure.	By:
On this day of, 20, personal whose identity is personally known to me or proved to me on that he/she is the Attorney-in-fact of the above-named Surety complied in all respects with the laws of Utah in reference to be acknowledged to me that as Attorney-in-fact executed the same Subscribed and sworn to before me this day of My Commission Expires: Resides at: Agent: Agent:	Company, and coming sole sure.	By:



#### Division of Facilities Construction and Management

**DFCM** 

#### INSTRUCTIONS AND SUBCONTRACTORS LIST FORM (VBS)

All proposers that desire to be considered are required to submit a list of <u>ALL</u> first-tier subcontractors, including the subcontractor's name, bid amount and other information required by these Contract Documents, on the following basis:

### PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED

- The DFCM Director may not consider any proposal submitted by a proposer if the proposer fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Proposer may not list more than one subcontractor to perform the same work.
- Proposer must list "Self" if performing work itself.

#### **LICENSURE:**

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Proposer shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

#### PROPOSER LISTING 'SELF' AS PERFORMING THE WORK:

Any proposer that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

#### 'SPECIAL EXCEPTION':

A proposer may list 'Special Exception' in place of a subcontractor when the proposer intends to obtain a subcontractor to perform the work at a later date because the proposer was unable to obtain a qualified or reasonable proposal under the provisions of U.C.A. Section 63A-5-208(4). The proposer shall insert the term 'Special Exception' for that category of work, and <a href="https://shall.provide.documentation">shall provide documentation</a> with the subcontractor list describing the proposer's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the proposer was unable to obtain a qualified subcontractor bid. The Director must find that the proposer complied in good faith with State law requirements for any 'Special Exception' designation, in order for the proposal to be considered. If awarded the contract, the Director shall supervise the proposer's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

## INSTRUCTIONS AND SUBCONTRACTORS LIST FORM Page No. 2

#### **GROUNDS FOR DISQUALIFICATION:**

The Director may not consider any proposal submitted by a proposer if the proposer fails to submit a subcontractor list meeting the requirements of State law. Owner may withhold awarding the contract to a particular proposer if one or more of the proposed subcontractors are considered by the Owner to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of Owner, the Owner may provide notice to the proposer and the proposer shall have 24 hours to submit the correction to the Owner. If such correction is submitted timely, then the sublist requirements shall be considered met.

#### CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to submission of the subcontractors list, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the contractor establishes that the subcontractor is not qualified for the work.

#### **EXAMPLE:**

Example of a list where there are only four subcontractors

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

 $\frac{\text{SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST}{\text{SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.}}$ 





### **Division of Facilities Construction and Management**

#### SUBCONTRACTORS LIST

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE
lternates. Ve have listed "Self" or "Spec	ctors as required by the instructions, including cial Exception" in accordance with the instructionately licensed as required by State law.		bid as well as ar
	FIRM:		
E:			

IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH PROPOSER. ACTION MAY BE TAKEN AGAINST PROPOSERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

/_	/	_/_	_/	/_	/_	_/_
		Pr	oiect	t No.	XXXXX	XX

#### DFCM AND DESIGN/BUILD TEAM **AGREEMENT**

THIS AGREEMENT made and entered into	o this day of, 20, by and between the DIV	ISION OF
FACILITIES CONSTRUCTION AND MA	NAGEMENT, hereinafter referred to as the "DFCM", a	nd (FILL IN
DESIGN/BUILD FIRM)	, a corporation authorized to do business in the	State of Utah
and consisting of a legally recognized busin	ness entity in the State of Utah and general contracting/c	construction
management and architectural/engineering	components, which are to be performed by (FILL IN	
DESIGN/BUILD FIRM)	, or entities under contract with (FILL IN DE	SIGN/BUILD
<b>FIRM</b> ), as appropriate.	(FILL IN DESIGN/ BUILD FIRM)	, shall
hereinafter be referred to as "DESIGN/BUI	LD TEAM".	
WITNESSETH: WHEREAS, DFCM intend	ds to have Work performed at	
WHEREAS, DESIGN/BUILD TEAM agre	es to perform the Work for the sum stated herein.	

NOW, THEREFORE, DFCM and DESIGN/BUILD TEAM for the consideration provided in this Agreement, agree as follows:

#### INTRODUCTION:

This Agreement is between DFCM and DESIGN/BUILD TEAM, consisting of the prime general contractor who shall also responsibly represent it's A/E's, architect's, engineer's, suppliers, consultants, subconsultants and subcontractors at any tier. There are designer and general contractor responsibilities identified in this Agreement. There are important documents incorporated by reference. While the DESIGN/BUILD TEAM maintains liability for all design and general contractor functions, the specific functions referred to in this Agreement as well as the documents incorporated by reference, shall be performed by the respective personnel of the DESIGN/BUILD TEAM that are qualified architects/engineers and general contractors.

The identity of the leaders of the specific functions of the DESIGN/BUILD TEAM are attached to this Agreement, entitled Exhibit "A." and made a part of this Agreement. Said leadership shall not be changed or substituted without written approval of the DFCM.

#### ARTICLE 1. DOCUMENTS INCORPORATED BY REFERENCE AND GENERAL PROVISIONS

#### 1.1 **DOCUMENTS INCORPORATED BY REFERENCE:**

1.1.1 Request for Proposals and General Conditions. The DESIGN/ BUILD TEAM and DFCM shall be bound by their respective obligations, duties and rights as referred to in the Request for Proposals identified as

"Announcement of Design/Build Competition for th	e Design and Construction of the (FILL IN TITLE OF RFP
<b>DOCUMENT</b> )	, herein after identified as "Announcement of
Design/Build Competition" and dated	, inclusive of all addenda, as well as the DFCM General
Conditions dated May 25, 2005, and on file with the	e Division of Facilities Construction and Management and by
this reference incorporated herein. The Cost Propos	al Form is hereby attached and made part of this agreement
and is entitled Exhibit "B". It is intended that this D	DESIGN/BUILD TEAM's Agreement not reiterate all the
applicable provisions of said Request for Proposals	and the General Conditions and the fact that some provisions
are reiterated herein does not lessen the importance	of the provisions that are not so reiterated. Unless the context
provides otherwise, all the definitions and interpreta	tions of provisions of this DESIGN/BUILD TEAM's
Agreement shall be as stated in said Announcement	of Design Build Competition and the General Conditions. In
case of conflict between the provisions of this DESI	GN/BUILD TEAM's Agreement, the Announcement of
Design/Build and the General Conditions, the follow	ving shall indicate which provision controls:

- (1) This Agreement shall control over conflicting provisions in the Announcement of Design/Build Competition and/or General Conditions.
- (2) The Announcement of Design/Build Competition shall control over conflicting provisions in the General Conditions.

Said General Conditions shall be construed in such a manner as that any reference to a right, responsibility, or duty of the General Contractor (Contractor) referred to in the General Conditions shall be deemed to refer to the DESIGN/BUILD TEAM. Any reference to A/E in the General Conditions shall be deemed to refer to the DESIGN/BUILD TEAM Architect/Engineer as applicable, and shall also be bound by the provisions in the General Conditions that refer to the duties and responsibilities of the A/E in the General Conditions. Unless otherwise specified by this Agreement, the definitions in the General Conditions shall apply to this Agreement.

- 1.1.2 **The Project Defined.** The Project is the total design and construction for which the DESIGN/BUILD TEAM is responsible, including all professional design services and all labor, materials and equipment used or incorporated in such design and construction for the project referenced by the Announcement of Design/Build Competition in Paragraph 1.1.1 above.
- 1.1.3 **The Work Defined**. The Work comprises the completed construction designed under the Project and includes labor necessary to produce such construction, and materials and equipment incorporated or to be incorporated in such construction.

#### 1.2 EXECUTION, CORRELATION, CONTRACTUAL RELATIONSHIP AND INTENT

- 1.2.1 This Agreement shall be signed in not less than duplicate by the DFCM and DESIGN/ BUILD TEAM.
  - 1.2.2 Nothing contained in this Agreement and the Contract Documents shall create a professional obligation or contractual relationship between the DFCM and any third party, including subcontractors, A/E's, consultants and suppliers at any tier of the DESIGN/BUILD TEAM. Notwithstanding this, it is understood and agreed that the DFCM is the intended third party beneficiary of all contracts for design or engineering services, all subcontracts, purchase orders and other agreements between the DESIGN/BUILD TEAM and third parties.

The DESIGN/BUILD TEAM shall incorporate the obligations of this Agreement into its respective subcontracts, supply agreements and purchase orders. The DESIGN/BUILD TEAM shall also be responsible to the DFCM for wrongful or negligent acts, errors or omissions of it's A/E, consultants, subcontractors, suppliers, agents and employees or those in privity with the DESIGN/BUILD TEAM, at any tier.

- the Utah State Building Board on May 25, 2005; the DFCM Design Manual dated May 25, 2005 and on file with the office of DFCM; this Agreement; the Conditions of the Contract (General and Supplementary Conditions); and all competition documents provided by DFCM to DESIGN/BUILD TEAM and all competition documents provided by DESIGN/BUILD TEAM to DFCM, which are identified in a list entitled Exhibit "C", hereby attached and made part of this Agreement. Clarifications to said proposal documents are hereby identified in Exhibit "D", which is hereby attached and made part of this Agreement. All such Contract Documents referred to in this Paragraph 1.3 are hereby incorporated by reference herein. Any reference in this Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.
- 1.4 CONTRACT DOCUMENTS COMPLIANCE, TERMS, INDEPENDENT CONTRACTOR. The Work to be performed shall be in accordance with all of the Contract Documents. All terms used in this Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions, except as otherwise provided in this Agreement. The DESIGN/BUILD TEAM Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the DESIGN/BUILD TEAM to the DFCM hereunder is that of an independent contractor.

## ARTICLE 2. DESIGN/BUILD TEAM

**2.1 RESPONSIBILITY ALLOCATION**. The components of the Design Team shall have primary responsibilities as follows:

2.1.1 Design services shall be performed	d by the A/E of the DESIGN/BUILD TEAM as well as the	
appropriate consultants (engineers, etc) selected ar	nd paid by the DESIGN/BUILD TEAM and acting in the	
interest of the DESIGN/BUILD TEAM. As part of	of the proposal of DESIGN/BUILD TEAM, (FILL IN NAM	ИE
OF DESIGN FIRM) has b	been selected as the A/E for the Project and is, or shall be	
promptly, under contract with the DESIGN/BUILI	D TEAM. DESIGN/BUILD TEAM shall notify DFCM of a	any
substantial change in the composition of the A/E a	ssigned to the Project, including but not limited to any major	or
changes of staffing or assignments of architects to	the Project. Any substantial change in the composition of tl	ne
A/E must be approved by DFCM in writing. The	identity of the leader of the specific functions of (FILL IN	
NAME OF DESIGN FIRM)	is (FILL IN NAME OF DESIGN FIRM	
REPRESENTATIVE), p	rincipal in charge of coordination of all design services. S	aid
leadership shall not be changed or substituted with	out written approval of the DFCM.	

- 2.1.2 Construction shall be performed in accordance with this Agreement and the Contract Documents by the qualified general contractor component of the DESIGN/BUILD TEAM as well as the appropriate subcontractors and suppliers at any tier in privity with the DESIGN/BUILD TEAM. Design Work shall be performed in accordance with this Agreement and the Contract Documents by the A/E component of the DESIGN/BUILD TEAM as well as the appropriate consultants at any tier in privity with the A/E.
- 2.1.3 The DESIGN/BUILD TEAM shall be responsible to the DFCM for wrongful or negligent acts, errors or omissions of the DESIGN/BUILD TEAM's employees and parties in privity of contract with the DESIGN/BUILD TEAM, at any tier, to perform any portion of the Work, including their agents and employees.
- **2.2 BASIC DESIGN SERVICES.** The DESIGN/BUILD TEAM's Basic Design Services consist of those described below and any other services identified in this DESIGN/BUILD TEAM Agreement as part of Basic Services related to design, including normal structural, mechanical, electrical, and architectural as well as other consulting services reasonably necessary to fulfill the design duties and responsibilities under this Agreement and the Contract Documents. The DESIGN/BUILD TEAM shall prepare and promptly distribute minutes of all meetings. Said minutes shall not be considered official minutes until approved by the DFCM.

#### 2.3 DESIGN DEVELOPMENT PHASE.

- 2.3.1 **Design Development Documents.** Based on the approved Design/Build Proposal, written authorization to proceed to Design Development signed by the DFCM, and any adjustments authorized by the DFCM in the program, or scope of work, schedule or construction budget, the DESIGN/BUILD TEAM shall prepare, for approval by the DFCM, Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. The Design Development Documents shall include the items listed in the Design Development Phase Checklist of the DFCM Design Manual incorporated by reference into this Agreement.
- 2.3.2 **Design Revisions.** The DFCM reserves the right to request minor design revisions and the DESIGN/BUILD TEAM shall promptly perform such revisions with no increase in cost beyond the Guaranteed Fixed Costs for all the Work of this Project.

#### 2.4 CONSTRUCTION DOCUMENTS PHASE.

2.4.1 **Construction Documents.** Based on the approved Design Development Documents, and written authorization to proceed to the Construction Documents Phase signed by the DFCM, and any further adjustments in the scope or quality of the Project or in the construction budget authorized by the DFCM, the DESIGN/BUILD TEAM shall prepare, for approval by the DFCM, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the Project. The Construction Documents shall include the items listed in the Contract Document Phase Checklist of the DFCM Design Manual incorporated by reference into this Agreement.

- 2.4.2 **Market Changes.** It is understood that the DESIGN/BUILD TEAM assumes the risk and cost of market changes with respect to the DESIGN/BUILD TEAM's scope of work. In the event any supplier under a Purchase Agreement with the State of Utah fails to perform according to the terms of his agreement, the DESIGN/BUILD TEAM will be entitled to an equitable adjustment of the contract price and time. The DESIGN/BUILD TEAM will use its best efforts in managing those suppliers to maintain the project schedule.
- 2.4.3 **Assist With Filing For Governmental Approval.** When requested by the DFCM, the DESIGN/BUILD TEAM shall assist the DFCM in all reasonable requests in connection with the DFCM's responsibility for filing documents required for approval of governmental authorities having jurisdiction over the Project.

#### 2.5 BIDDING OR NEGOTIATION PHASE.

- 2.5.1 **Duties; In General.** After receipt of the written authorization to proceed to the Bidding or Negotiation Phase by DFCM, the DESIGN/BUILD TEAM shall obtain bids or negotiate proposals and award contracts to subcontractors, subconsultants and suppliers which are consistent with the Design/Build Agreement. The term "bid" in the Agreement is also meant to mean "proposal" where the DESIGN/BUILD TEAM is using a request for proposal procurement process.
- (1) The DESIGN/BUILD TEAM shall promptly supply ten (10) complete sets of Final Construction Documents to DFCM.
- (2) **Specified Subcontractors**: The specifically cited subcontractors, along with their license number (if required) and estimated cost, have been listed as a submission with the DESIGN/ BUILD TEAM cost proposal. Any substantial variation from the original estimate, submitted on (**FILL IN DATE PROPOSAL WAS SUBMITTED**) \_\_\_\_\_\_ as part of the Cost Proposal, shall be accompanied by a written explanation from the Contractor justifying the variation and describing how the variation meets or exceeds the "value" to the DFCM on the project.
- (3) **Non-Specified Subcontractors**: The non-specified subcontractor's scope of work and estimated costs shall be listed as a submission with the DESIGN/BUILD TEAM cost proposal. Within 24 hours after the Contractor "opens" the non-specified subcontractors bid and if the bid is from a subcontractor that would otherwise be required to be part of a sublist under UCA 63-5a-208 if the procurement was performed directly by DFCM in bidding process, the DESIGN/BUILD TEAM shall submit name of the subcontractor along with their license number (if required) and estimated cost to DFCM. During the competitive bid process by the DESIGN/BUILD TEAM for these subcontractors, DFCM shall have a representative at the bid opening and subcontractor's selection.
- (4) The DESIGN/BUILD TEAM shall at all reasonable times be available personally, or have available, a responsible member of his or her staff to make such interpretations of the Contract Documents as are necessary to facilitate completion of the construction contract by the DESIGN/BUILD TEAM's subcontractors and suppliers.
- (5) If subcontractor's are selected through a proposal process and the DESIGN/BUILD TEAM fails to comply with the sublist requirements of UCA 63-5a-208 for bids made applicable in this Agreement to proposals, the DESIGN/BUILD TEAM shall have 24 hours to cure such failure after receiving written notice from DFCM.

#### 2.6 CONSTRUCTION PHASE-ADMINISTRATION OF THE CONSTRUCTION.

- 2.6.1 **Advise And Consult.** The DESIGN/BUILD TEAM shall advise and consult with the DFCM during the Construction Phase. No one shall be entitled to rely upon any representation by the DESIGN/BUILD TEAM unless it is in writing and signed by the DESIGN/BUILD TEAM Project Manager or a principal of the DESIGN/BUILD TEAM.
- 2.6.2 **Representations by Third Parties, and Officials, Other Than DFCM.** DESIGN/BUILD TEAM may not rely on any representations of other state agencies, officials or any third parties unless specifically approved in writing by DFCM.
- 2.6.3 **Record Copy at Site.** The DESIGN/BUILD TEAM shall maintain in good order at the site one record copy of the drawings, specifications, product data, samples, shop drawings, Change Orders and other Modifications, marked currently to record changes made during construction. At the conclusion of the Construction Phase the DESIGN/BUILD TEAM shall prepare and furnish to the DFCM a complete set of Record Drawings (corrected original tracings or re-plotted CADD drawings), one set of mylar reproducible Record Drawings and two (2) sets of Specifications depicting the Project.

**CADD Criteria**. The "DFCM CADD Criteria" which is a part of the Design Manual shall be reviewed by the A/E and shall be used to define and/or supplement any terms or responsibilities under this Agreement. The DFCM CADD Criteria in the Design Manual in case of conflict, shall supercede any provision of this Agreement.

#### 2.7 ADDITIONAL SERVICES: IN GENERAL.

- 2.7.1 **Written Authorization Required.** The DESIGN/BUILD TEAM shall perform all duties and responsibilities required by this Agreement and the Contract Documents for the Guaranteed Fixed Price. If the DESIGN/BUILD TEAM reasonably believes that a particular duty or responsibility is beyond that identified by this Agreement or the Contract Documents, then the DESIGN/BUILD TEAM shall not be entitled to any amount which would result in an increase in the Guaranteed Fixed Price unless, prior to performing the subject duty or responsibility, the DESIGN/BUILD TEAM has requested in writing a Modification to this Agreement and the Modification has been approved, in writing, by DFCM. The provisions of the General Conditions regarding Modifications, requests for additional time and additional monies shall apply to this Agreement.
- 2.7.2 When Not Paid by DFCM. Notwithstanding anything to the contrary in this Agreement, DFCM shall not be responsible to pay and the DESIGN/BUILD TEAM shall not be entitled to receive, compensation for any Contingent Additional Services if such services were required due to the fault of the DESIGN/BUILD TEAM or the DESIGN/BUILD TEAM's failure to perform in accordance with the terms of this Agreement. Notwithstanding this, there shall be no right to payment for additional services or contingent additional services if such services are not approved in advance by DFCM in writing.

#### 2.8 STANDARD FOR PERFORMANCE.

2.8.1 **Due Care and Diligence; In General.** DESIGN/BUILD TEAM shall exercise the degree of skill and diligence as exercised by members of the DESIGN BUILD TEAM'S profession having substantial experience on projects similar in type, magnitude and complexity to the Project that is the

subject of this Agreement and all of the services under this Agreement shall be performed as expeditiously as is consistent with said standards. The DESIGN/BUILD TEAM shall be liable to the Owner for claims, liabilities, additional burdens, penalties, damages or third party claims, to the extent caused by wrongful or negligent acts, errors or omissions that do not meet this standard of care.

2.8.2 **Due Care and Diligence; Discovering and Reporting Defects and Deficiencies.** The DESIGN/BUILD TEAM shall exercise due care and diligence in discovering and promptly reporting to the DFCM any defects or deficiencies in the Work. Any defective Designs or Specifications furnished by the DESIGN/BUILD TEAM shall be promptly corrected by the DESIGN/BUILD TEAM at no cost to the DFCM, and the DESIGN/BUILD TEAM shall promptly reimburse the DFCM for all damages, if any, resulting from the use of such defective Designs or Specifications. The DFCM's approval, acceptance, use of or payment for all or any part of the DESIGN/BUILD TEAM'S services hereunder or of the Project itself shall in no way alter the DESIGN/BUILD TEAM'S obligations or the DFCM's rights hereunder.

#### 2.9 TESTS, INSPECTIONS AND REPORTS.

- 2.9.1 DFCM shall be responsible for all structural (soils and concrete), mechanical, electrical testing required by law or code. It shall be DESIGN/BUILD TEAM's responsibility to determine when, which, and to the extent that such tests, inspections and reports are required by the Contract Documents. The DFCM may review and comment, when appropriate, on the accuracy of the tests and information furnished by the DESIGN/BUILD TEAM pursuant to this Paragraph 2.9.1. The DFCM will be monitoring tests and inspections for the subject work. The DESIGN/BUILD TEAM shall coordinate all test and inspections with the DFCM. All other tests or inspections required by contract documents shall be furnished at the DESIGN/BUILD TEAM's expense.
- 2.9.2 The DFCM shall be responsible for all chemical, air and water pollution tests, tests for hazardous material, and other laboratory and environmental tests, inspections and reports, including those required by law or the Contract Documents. It shall be DFCM's responsibility to determine when, which, and to the extent that such tests, inspections and reports are required by the Contract Documents. The DFCM may review and comment, when appropriate, on the accuracy of the tests and information furnished by the DESIGN/BUILD TEAM pursuant to this Paragraph 2.9.2. The services, information, surveys and reports required by this Paragraph 2.9.2 shall be furnished at the DFCM's expense. The DFCM will be monitoring tests and inspections for the subject work. The DESIGN/BUILD TEAM shall coordinate all test and inspections with the DFCM.

### ARTICLE 3. DFCM'S RESPONSIBILITIES

- **3.1 INFORMATION.** The DFCM shall provide full information regarding requirements for the Project, including a program or scope of work which shall set forth the DFCM's objectives, schedule, constraints, and criteria, including space requirements and relationships, flexibility, expandability, special equipment, systems and site requirements.
- **RESPONSE TO DESIGN/BUILD TEAM.** The DFCM shall give reasonable consideration to all sketches, estimates, working drawings, specifications, proposals, and other documents presented by the

DESIGN/BUILD TEAM; and to inform the DESIGN/BUILD TEAM of the decisions, in writing, within a fourteen (14) day time period.

- **3.3 DFCM PROJECT MANAGER.** The DFCM shall designate a DFCM Project Manager authorized to act on the DFCM's behalf with respect to the Project. The DFCM or such Project Manager shall render decisions within a fourteen (14) day time period pertaining to documents submitted by the DESIGN/BUILD TEAM in order to avoid unreasonable delay in the orderly and sequential progress of the DESIGN/BUILD TEAM's services and Work. The DFCM may appoint an on-site project representative to observe the Work and to have such other responsibilities as the DFCM deems necessary to facilitate this Agreement.
- **3.4 COMMUNICATIONS.** DFCM shall communicate with subcontractors at any tier and material suppliers of the DESIGN/BUILD TEAM only through the DESIGN/BUILD TEAM. DESIGN/BUILD TEAM shall communicate to DFCM directly and not through the User or any other governmental agency. DESIGN/BUILD TEAM shall not rely on any comments or writings of User without express consent in writing of DFCM.

### ARTICLE 4. TIME

**4.1 DESIGN FUNCTION SCHEDULE.** Time limits provided by the RFP shall not be exceeded by the DESIGN/BUILD TEAM or DFCM. Any extensions of time from the schedule shall be void and of no force and effect until such adjustments are agreed to in writing by the DFCM and DESIGN/BUILD TEAM.

4.2 CONSTRUCTION FUNCTION SCHEDULE. TIME OF COMPLETION OF CONSTRUCTION
WORK AND DELAY REMEDY. The Construction Work shall be Substantially Complete within (FILL IN
COMPLETION TIME) () calendar days after the date of the Notice to Proceed.
DESIGN/BUILD TEAM agrees to pay liquidated damages in the amount of \$ per day for each day after
expiration of the Contract Time until the DESIGN/BUILD TEAM achieves Substantial Completion in
accordance with the Contract Documents, if the DESIGN/BUILD TEAM's delay makes the damages applicable.
The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein
because actual damages can not be readily ascertained at the time of execution of this Design/Build Agreement;
(c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages,
such as costs to complete or remedy defective Work.

No PRE, Claim or action shall be maintained by the DESIGN/BUILD TEAM or Subcontractor or material supplier of DESIGN/BUILD TEAM at any tier, against the DFCM for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions, including procedural, timing and substantive provisions of the General Conditions.

## **ARTICLE 5. PAYMENTS**

**5.1 COMPENSATION.** The DFCM shall compensate the DESIGN/BUILD TEAM for work properly performed in accordance with the Contract Documents after the DFCM's receipt and approval of the DESIGN/BUILD TEAM's detailed monthly statement and any lien waivers or releases previously requested by DFCM.

DFCM FORM 5b-2 062107 25

5.1.1 <b>Gu</b> a	aranteed Fixed Contract Amount. The DFCM agrees	s to pay and the DESIGN/BUILD
TEAM agrees to acc	ept in full performance of the design work and the con-	struction Work under this
DESIGN/BUILD TI	EAM's Agreement, not more than the sum of (FILL IN	CONTRACT AMOUNT)
	DOLLARS AND NO CENTS (\$	00) which sum is the proposal
amount submitted or	1 and which sum shall be the guarant	eed fixed contract amount. Payment to
the DESIGN/BUILI	TEAM will be made within thirty (30) calendar days	of receipt of payment application by
DFCM.		

The DESIGN/BUILD TEAM shall provide DFCM within thirty (30) days of request by DFCM, a schedule of accounts and budgets for Work which will be used as a basis for applications for payment. The DFCM agrees to pay the DESIGN/BUILD TEAM for the construction Work and the design services from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E as approved by DFCM which approval may not be unreasonably withheld, for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The DESIGN/BUILD TEAM agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the DESIGN/BUILDER requests payment and agrees to safeguard and protect such equipment or materials and is responsible for the safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the DESIGN/BUILD TEAM at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. Additional retainage shall be imposed if, in the written opinion of the Director of the Division of Facilities Construction and Management, special circumstances or considerations justify the imposition of additional retainage in the interest of the State.

- 5.1.2 **DESIGN/BUILD TEAM Expenses.** The guaranteed fixed contract amount shall include all expenses of the DESIGN/BUILD TEAM, including travel, lodging, per diem and other costs associated with the performance of the duties and work under this Agreement.
- **5.2 DESIGN/BUILD TEAM'S ACCOUNTING RECORDS.** All Accounting Records shall be available to the DFCM or the DFCM's authorized representative at mutually convenient times.

### ARTICLE 6. CHANGES IN THE WORK

**6.1 ADDITIONAL WORK.** It is understood and agreed by the parties hereto that no money will be paid to the DESIGN/BUILD TEAM for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

Modifications shall be issued in accordance with the General Conditions. No action, conduct, omission, prior failure or course of dealing by the DFCM shall act to waive, modify, change, or alter this requirement. Written modifications are the exclusive method for effecting any change to the contract sum or contract time. The

DESIGN/BUILD TEAM understands and agrees that the contract sum and contract time cannot be changed by implication, oral agreements, actions, inactions, course of conduct or contractor initiated change order.

### ARTICLE 7. INSURANCE, BONDS AND INDEMNIFICATION

- **7.1 IN GENERAL**. To protect against liability, loss and/or expense arising in connection with the performance of services described under this DESIGN/BUILD TEAM's Agreement, the DESIGN/BUILD TEAM shall obtain and maintain in force during the entire period of this DESIGN/BUILD TEAM's Agreement, at its own expense, the following insurance from insurance companies authorized to do business in the State of Utah and rated "A" or better with a financial size category of Class X or larger. An exception to the above-stated rating and financial size category requirements is for the professional liability insurance referred to in 7.2.1(1) below, in which case the rating must be "B" or better with a financial size category of Class VIII or larger. All said ratings and financial size categories shall be as published by A.M. Best Company at the time this DESIGN/BUILD TEAM's Agreement is executed.
- **7.2 DESIGN/BUILD TEAM INSURANCE.** Insurance for the general construction management and architectural components of the DESIGN/BUILD TEAM shall be provided as required below:
- 7.2.1 **General Contractor's Insurance.** In addition to the insurance required in Section 7.4 below, the DESIGN/BUILD TEAM shall meet all the insurance requirements for a General Contractors as required by the General Conditions.
- **7.3 GENERAL CONTRACTOR'S BONDS**. In addition to the insurance required above, the bonds for the General Contractor functions under this Agreement shall be provided as required by the General Conditions. The 100% performance and payment bonds may exclude the amount attributable to design services as agreed to by DFCM. The performance and payment bonds must be in effect and provided to DFCM on the standard DFCM forms prior to the issuance of a notice to proceed for the actual construction work.
- **7.4 DESIGN INSURANCE.** In addition to the insurance required above, the following insurance for the design services under this Agreement shall be provided:
- 7.4.1 DESIGN/BUILD TEAM Designer's Professional Liability Insurance. The DESIGN/BUILD TEAM shall maintain a professional liability insurance policy on a claims made basis, annual aggregate policy limit based on the following chart, unless modified in an attachment to this Agreement.

Construction Budget_	Minimum Liability Coverage
\$50,000,000 and above	\$2,000,000 per claim,
	\$4,000,000 aggregate
\$25,000,000 and above, but under \$50,000,000	\$2,000,000 per claim,
	\$2,000,000 aggregate
\$1,500,000 and above but under \$25,000,000	\$1,000,000 per claim,
	\$1,000,000 aggregate
Under \$1,500,000	\$ 500,000 per claim,
	\$ 500,000 aggregate

- 7.4.2 Valuable papers and Records Coverage and/or Electronic Data Processing (Data and Media) Coverage. The DESIGN/BUILD TEAM and all engineering consultants of the DESIGN/BUILD TEAM shall provide coverage for the physical loss of or destruction to their work product including drawings, specifications and electronic data and media.
- 7.5 ADDITIONAL COVERAGE. The DFCM reserves the right to require additional coverage from that stated hereinabove, at the DFCM's expense for the additional coverage portion only. DFCM also reserves the right to require project specific insurance, and if such right has been exercised it shall be indicated as an exhibit to this DESIGN/BUILD TEAM's Agreement. Unless project specific insurance is required by the DFCM, the coverage may be written under a practice policy with limits applicable to all projects undertaken by the firm but must be maintained in force for the discovery of claims for a period of three (3) years after the date final payment is made to the DESIGN/BUILD TEAM under this DESIGN/BUILD TEAM's Agreement. All policies provided by the DESIGN/BUILD TEAM must contain a "retroactive" or "prior-acts" date which precedes the earlier of, the date of the DESIGN/BUILD TEAM's Agreement or the commencement of the DESIGN/BUILD TEAM's services. The DESIGN/BUILD TEAM's policy must also include a contractual liability endorsement applicable to the indemnity provision contained under this Article of this DESIGN/BUILD TEAM's Agreement. Any review and approval by the DFCM does not relieve the DESIGN/BUILD TEAM of any responsibility of liability for an error, omission, submittal or work.
- 7.6 FURNISH EVIDENCE OF INSURANCE, CERTIFICATES, ADDITIONAL INSURED. The DESIGN/BUILD TEAM shall submit certificates in form and substance satisfactory to the DFCM as evidence of the insurance requirements of this Article. Such certificates shall provide the DFCM with thirty (30) days notice prior to the cancellation, material change or non-renewal of the applicable coverage, as evidenced by return receipt, certified mail, sent to DFCM. The DESIGN/BUILD TEAM shall notify DFCM within thirty (30) days of any claim(s) against the DESIGN/BUILD TEAM which singly or in the aggregate exceed 20% of the applicable required insured limits, and the DFCM may require the DESIGN/BUILD TEAM to reinstate the policy to provide full protection at the original limits.

The State of Utah shall be named as an insured party, as primary coverage and not contributing, on all the insurance policies required by this Article except the professional liability and workers' compensation policies. The DFCM reserves the right to request the DESIGN/BUILD TEAM to provide a loss report from their insurance carrier.

**7.7 DFCM RECOURSE.** The DESIGN/BUILD TEAM agrees to maintain the insurance described in this Article during the required term. If the DESIGN/BUILD TEAM fails to furnish and maintain said required insurance, the DFCM may purchase such insurance on behalf of the DESIGN/BUILD TEAM, and the DESIGN/BUILD TEAM shall pay the cost thereof to the DFCM upon demand and shall furnish to the DFCM any information needed to obtain such insurance.

#### 7.8 INDEMNIFICATION.

7.8.1 **In General.** To the fullest extent permitted by law, the DESIGN/BUILD TEAM shall indemnify and hold harmless the State of Utah, its institutions, agencies, departments, divisions, authorities, and instrumentalities, boards, commissions, elected or appointed officers, employees, agents, authorized volunteers (hereinafter the above listing of entities and persons is referred to as "indemnities") from and against every kind and character of claims, damages, losses and expenses, including but not limited to attorneys' fees,

arising out of or resulting from any act or omission in the performance of the Work under this DESIGN/BUILD TEAM's Agreement including the work of anyone directly or indirectly employed by the DESIGN/BUILD TEAM, the DESIGN/BUILD TEAM's agent, consultant or independent contractor, or anyone for whose acts any of them may be liable, provided that any such claim, damage, loss or expense is caused in whole or in part by the negligent or intentional act or omission of the DESIGN/BUILD TEAM, anyone directly or indirectly employed by the DESIGN/BUILD TEAM, the agent, consultant or independent contractor of any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a part indemnified hereunder. The DESIGN/BUILD TEAM shall defend all actions brought upon such matters to be indemnified hereunder and pay all costs and expenses incidental thereto, but the State of Utah shall have the right, at its option, to participate in the defense of any such action without relieving the DESIGN/BUILD TEAM of any obligation hereunder.

- 7.8.2 **Not Reduce Current Rights.** Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person under this DESIGN/BUILD TEAM's Agreement.
- 7.8.3 **Not Bound By Damage Limitations Under Certain Acts.** In claims against any person or entity indemnified under this Paragraph 7.8 by an employee of the DESIGN/BUILD TEAM, anyone directly or indirectly employed by the DESIGN/BUILD TEAM, the agent, consultant or independent contractor of any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 7.8 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the DESIGN/BUILD TEAM or said employee, agent, consultant, independent contractor or anyone for whose acts any of them may be liable, under workers' or workmen's compensation acts, disability benefits acts or other employee benefit acts.

### ARTICLE 8. DISPUTE RESOLUTION

**8.1 DISPUTES.** Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

### ARTICLE 9. TERMINATION, SUSPENSION OR ABANDONMENT

**9.1 IN GENERAL.** This Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

# ARTICLE 10. OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

**10.1 IN GENERAL.** All Drawings, Specifications, other Contract Documents, as well as studies and projects prepared by the DESIGN/BUILD TEAM under this Agreement, are and shall remain the property of the DFCM, and DFCM shall retain all common law, statutory and other reserved rights with respect thereto. All other provisions regarding the use, re-use and other provision regarding such items as stated in the General Conditions shall apply.

### ARTICLE 11. MISCELLANEOUS PROVISIONS

- **11.1 GOVERNING LAW AND VENUE.** Unless otherwise provided, this DESIGN/BUILD TEAM's Agreement shall be governed by the laws of the State of Utah. Salt Lake County, State of Utah, shall be the venue of any legal proceeding regarding the terms or enforcement of this DESIGN/BUILD TEAM's Agreement.
- 11.2 WAIVER TO EXTENT OF RECOVERY OF INSURANCE MONIES. The DFCM and DESIGN/BUILD TEAM waive all rights against each other and against the DESIGN/BUILD TEAM's consultants, subcontractors, agents and employees of the other for damages, but only to the extent covered by the DFCM provided Builder's Risk Policy concerning damage to the Work during construction, except such rights as they may have to the proceeds of such insurance as set forth in the General Conditions. The DFCM and DESIGN/BUILD TEAM each shall require similar waivers from their contractors, subcontractors, consultants and agents at any tier.
- 11.3 BINDING AGREEMENT AND ASSIGNMENT PROVISIONS. The DFCM and DESIGN/BUILD TEAM respectively, bind themselves, their successors, assigns and legal representatives to the other party to this DESIGN/BUILD TEAM's Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this DESIGN/BUILD TEAM's Agreement. Neither the DFCM nor the DESIGN/BUILD TEAM shall assign its interest in this Agreement without the written consent of the other, except that the Contractor hereby consents to the assignment of the DFCM's interest herein as provided in this Article 11.
- **11.4 INTEGRATION AND AMENDMENT.** This DESIGN/BUILD TEAM's Agreement represents the entire and integrated agreement between the DFCM and DESIGN/BUILD TEAM and supersedes all prior negotiations, representations or agreements, either written or oral. Except for Construction Change Directives issued under the General Conditions, this Agreement may be amended only by written instrument signed by both DFCM and DESIGN/BUILD TEAM.
- 11.5 **THIRD PARTIES.** Except for DFCM's third party beneficiary rights described in this Agreement, nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the DFCM or DESIGN/BUILD TEAM.
- **11.6 HAZARDOUS MATERIALS.** The responsibilities of the DFCM and the DESIGN/BUILD TEAM regarding Hazardous Materials shall be as specified in the General Conditions and the Contract Documents.
- 11.7 PROMOTION. The DESIGN/BUILD TEAM shall have the right to include accurate representations of the design of the Project, including photographs of the exterior and interior, among the DESIGN/BUILD TEAM's promotional and professional materials. The DESIGN/BUILD TEAM's materials shall not include the DFCM's or the State's confidential or proprietary information if the DFCM has previously advised the DESIGN/BUILD TEAM in writing of the specific information considered by the DFCM to be confidential or proprietary. The DFCM shall provide professional credit for the DESIGN/BUILD TEAM on the construction sign and in the promotional materials for the Project. For purposes of this Paragraph 11.7, reference to the "DESIGN/BUILD TEAM" shall include the DESIGN/BUILD TEAM's consultants.

- **11.8 INDEPENDENT CONTRACTOR.** The DESIGN/BUILD TEAM shall be considered an independent DESIGN/BUILD TEAM, and as such, shall have no authorization, express or implied, to bind the State of Utah or the DFCM-to any agreement, settlement, liability or understanding whatsoever, nor to perform any acts as agent for the State of Utah or DFCM, except as specifically set forth in this DESIGN/BUILD TEAM's Agreement.
- **11.9 WRITTEN NOTICE.** DFCM and DESIGN/BUILD TEAM shall be subject to the written notice provisions of the General Conditions.
- **11.10 DFCM/AGENCY REVIEW.** DFCM or any other entity's (including agency user's of the State of Utah) plan reviews or any other type or nature of review shall in no way relieve the DESIGN/BUILD TEAM of design liability or contractual responsibility under this DESIGN/BUILD TEAM's Agreement. Any guidelines, specifications, drawings or plans provided by the DFCM or any other entity to the DESIGN/BUILD TEAM shall not relieve the DESIGN/BUILD TEAM of design liability or contractual responsibility under this Agreement.

#### 11.11 CONSULTANTS.

- 11.11.1 **Not Use "Sales" or "Agent" A/E's or Consultants.** The DESIGN/BUILD TEAM agrees not to use "sales" or "agent" A/E's or consultants. Said A/E's or Consultants are not to benefit financially either directly or indirectly from the sale or use of any product on or in the Project.
- 11.11.2 **A/E and Consultant Qualifications.** All A/E and Consultants must be licensed in Utah for the professional practice used on the Project and be approved in writing, in advance, by the DFCM.
- **11.12** A/E, CONSULTANTS, SUBCONTRACTORS OF DESIGN/BUILD TEAM. Any A/E, subcontract, supplier, or consultants agreement that the DESIGN/BUILD TEAM may enter into in regard to the Project of this DESIGN/BUILD TEAM's Agreement, shall require conformance with the provisions of this DESIGN/BUILD TEAM's Agreement, to the extent applicable.
- 11.13 WORK BY DFCM OR DFCM'S CONTRACTORS. The DFCM reserves the right to perform work related to, but not part of, the Project and to award separate contracts in connection with other work at the site. The DESIGN/BUILD TEAM shall cooperate with the DFCM to afford the DFCM's other contractors a reasonable opportunity for access and storage of their materials and equipment for execution of their work. The DESIGN/BUILD TEAM shall incorporate and coordinate the DESIGN/BUILD TEAM's Work with work of the DFCM's separate contractors as required by the Contract Documents. The DESIGN/BUILD TEAM shall promptly notify the DFCM if any such independent action will in any way compromise the DESIGN/BUILD TEAM's ability to meet the DESIGN/BUILD TEAMS's responsibilities under this Agreement.
- **11.14 SEVERABILITY**. In case a provision of this Agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected.
- **11.15 OBSERVATIONS.** The Work shall be observed for acceptance in accordance with the General Conditions. DESIGN/BUILD TEAM shall have a Utah duly licensed architect or engineer, visit the site at least once per week during construction and shall make appropriate observations and promptly write and send to the DFCM written reports for each site visit. DFCM may request more periodic site observations by the A/E

if needed. The A/E shall be compensated for additional work properly performed and approved in advance in writing by DFCM as well as not caused by errors and/or omissions of DESIGN/BUILD TEAM. The A/E shall report promptly any deficiencies, defects or problems with the Work or site conditions.

- 11.16 RELATIONSHIP OF THE PARTIES AND ASSIGNMENT. The DESIGN/BUILD TEAM accepts the relationship of trust and confidence established by this DESIGN/BUILD TEAM's Agreement and covenants with the DFCM to cooperate with the DFCM and utilize the DESIGN/BUILD TEAM's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.
- 11.17 SUCCESSORS AND ASSIGNS. The DFCM and DESIGN/BUILD TEAM, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Agreement. The DESIGN/BUILD TEAM shall not assign the Contract without the prior written consent of the DFCM, nor shall the DESIGN/BUILD TEAM assign any moneys due or to become due as well as any rights under the Contract, without prior written consent of the DFCM.

The DFCM agrees to exercise reasonable best efforts to enable the DESIGN/BUILD TEAM to perform the Work by furnishing and approving in a timely way, information required by the DESIGN/BUILD TEAM in accordance with the requirements of the Contract Documents.

- **11.18 AUTHORITY TO EXECUTE AND PERFORM AGREEMENT.** DESIGN/BUILD TEAM and DFCM each represent that the execution of this DESIGN/BUILD TEAM's Agreement and the performance thereunder is within their respective duly authorized powers.
- **11.19 ATTORNEY FEES AND COSTS.** Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this DESIGN/BUILD TEAM's Agreement or recover damages or any other action as a result of a breach thereof.
- **11.20 EXTENT OF AGREEMENT.** This Agreement represents the entire agreement between the DFCM and DESIGN/BUILD TEAM and supersedes any prior negotiations, representations or agreements. This Agreement may be amended only by written instrument signed by both DFCM and DESIGN/BUILD TEAM. The DESIGN/BUILD TEAM and DFCM for themselves, their heirs, successors, executors, and administrators, whichever may be applicable, hereby agree to the full performance of this Agreement and the Contract Documents.

DESIGN/BUILD TEAM and DFCM each represent that the execution of this DESIGN/BUILD TEAM's Agreement and the performance thereunder is within their respective duly authorized powers.

**IN WITNESS WHEREOF**, the parties hereto have executed this DESIGN/BUILD TEAM's Agreement on the day and year stated hereinabove.

	DESIGN/BUILD TEAM:			
	Signature	Date		
State of)	Title:			
County of)	Please type/print name clearly			
On this day of, 20, personally known to me (or proved to me on the affirmed), did say that he (she) is the signed by him (her) in behalf of said firm.	e basis of satisfactory evidence) and who by	me duly sworn (d		
(SEAL)	Notary Public	_		
(OD/ID)	My Commission Expires			
APPROVED AS TO AVAILABILITY OF FUNDS:	DIVISION OF FACILITIES CONSTRUCTION AND MANAGE	MENT		
David D. Williams, Jr. Date DFCM Administrative Services Director	F. Keith Stepan Director	Date		
APPROVED AS TO FORM: ATTORNEY GENERAL	APPROVED FOR EXPENDITURE:			
May 25, 2005 By: ALAN S. BACHMAN Asst Attorney General	Division of Finance	Date		

### **LIST OF ATTACHMENTS**

Exhibit "A" DESIGN/BUILD TEAM Leaders

Exhibit "B" Cost Proposal Form with Cost Breakdown

(1.1.1)

Exhibit "C" List of Competition Documents

(1.3)

Exhibit "D" Clarification Items

(1.3)

#### PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That			rred to as the "Principal" and
		, a corporation organized and existing	
		authorized to transact business in this State and U.	
		eptable Securities on Federal Bonds and as Accep	
hereinafter referred to as th		ate of Utah, hereinafter referred to as the "Obligee,	
		DOLLARS (\$	
said Principal and Surety bi	and themselves and their heirs, administrators, ex	ecutors, successors and assigns, jointly and severall	y, firmly by these presents.
WHEREAS, th	e Principal has entered into a certain written Con	tract with the Obligee, dated the day of _	, 20, to
construct			
in the County of	, State of Utah, Project No	, for the approximate sum of	) which
Contract is hereby incorpor	rated by reference herein.	, for the approximate sum of Dollars (\$	
		at if the said Principal shall faithfully perform the C and conditions thereof, the one year performance v	
		his obligation shall be void; otherwise it shall rema	
Contract as said Contract in	by be subject to Modifications of changes, then	ins congution shall be void, otherwise it shall remain	in in run force and effect.
No right of action	on shall accrue on this bond to or for the use of a	ny person or corporation other than the state named	I herein or the heirs, executors,
administrators or successor			
m ·	advida diamera		
The parties agre	e that the dispute provisions provided in the Cont	ract Documents apply and shall constitute the sole di	spute procedures of the parties.
PROVIDED. F	HOWEVER, that this Bond is executed pursuant	to the Provisions of Title 63, Chapter 56, Utah Code	Annotated, 1953, as amended
		rovisions to the same extent as if it were copied at l	
		r	
IN WITNESS V	WHEREOF, the said Principal and Surety have	signed and sealed this instrument this day of	, 20
NAME OF THE OWN	MICA	PDVI CVD A V	
WITNESS OR ATTESTA	ATION:	PRINCIPAL:	
		Ву:	
			(Seal)
		Title:	
WITNESS OR ATTESTA	ATION:	SURETY:	
		Ву:	
		Attorney-in-Fact	(Seal)
STATE OF			
	) ss.		
COUNTY OF	)		
O. 4.:- 4	20	11	1
		before me	
		ry evidence, and who, being by me duly sworn, did zed to execute the same and has complied in all res	
		, and that he/she acknowledged to me that as Attorr	
reference to occoming soic	surety upon bonds, undertakings and obligations	, and that he/she acknowledged to the that as Attori	ley-in-ract executed the same.
Subscribed and sworn to be	efore me this day of	, 20	
	·		
•			
Resides at:			
		NOTARY PUBLIC	
Agency:		—— <b> </b>	
Agent:		— ∥	T F 14 07 0007
		Approved A	As To Form: May 25, 2005 nan, Asst Attorney General
Phone:		by Aiaii S. Bachin	ian, Assi Anomey General

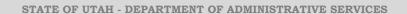
DFCM FORM 5b-2 062107 35

#### PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

#### KNOW ALL PERSONS BY THESE PRESENTS:

That	hereinafter referred to as the "Principal," and				
	orporation organized and existir				
and U. S. Department of the Treas					
Acceptable Reinsuring Companies					
the State of Utah hereinafter referr					
Dollars (\$); and assigns, jointly and severally,		id Principal and Sure	ty bind themselves and thei	r neirs, administrators, ex	ecutors, successors
and assigns, jointry and severally,	inning by these presents.				
	ipal has entered into a certain w		he Obligee, dated the	day of	, 20,
in the County of	State of Litch Ducient No.		for the annuarimete sum o	c .	
in the County of	, State of Otan, Project No		Dollars (\$	) which c	ontract is hereby
incorporated by reference herein.			Βοπαία (ψ		shiract is hereby
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or Principal's Subcontractors in cor	the condition of this obligation in			11 0 0	
Work provided for in said Contrac	= = = = = = = = = = = = = = = = = = = =	-			, prosecution of the
worm provided for in said contide	,, then, this congulation shall co	ora, ourer wise it sim		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
That said Surety to this	Bond, for value received, hereby	stipulates and agrees	s that no changes, extension	s of time, alterations or ad	ditions to the terms
of the Contract or to the Work to be	performed thereunder, or the spe	ecifications or drawin	gs accompanying same shal	l in any way affect its oblig	gation on this Bond,
and does hereby waive notice of an			litions to the terms of the Co	ontract or to the Work or to	o the specifications
or drawings and agrees that they sh	nall become part of the Contract	Documents.			
	<b>ER</b> , that this Bond is executed p	•	-		3, as amended, and
all liabilities on this Bond shall be	determined in accordance with	said provisions to the	e same extent as if it were c	opied at length herein.	
IN WITNESS WHER	EOF, the said Principal and Sur	rety have signed and	sealed this instrument this	day of	, 20
***************************************			DDVIVOVD I V		
WITNESS OR ATTESTATION	•		PRINCIPAL:		
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			By:		
			,		(Seal)
			Title:		
WITNESS OR ATTESTATION	:		SURETY:		
			Bv:		
STATE OF	)		Attorney-in-Fact		(Seal)
	) ss.				(4-11-)
COUNTY OF	)				
On this day of		20, personally	appeared before me		
			hose identity is personally l	•	
satisfactory evidence, and who, bei					
authorized to execute the same an				g sole surety upon bonds	, undertakings and
obligations, and that he/she acknow	viedged to me that as Attorney-	in-ract executed the s	same.		
Subscribed and sworn to before me	e this day of		20		
Subscribed and sworn to before the	day or		, 20		
My commission expires:					
Resides at:					
			NOTARY PUBLIC		
Agency:					
Agent:					
Address:				Approved As To Fo	orm: May 25, 2005
Phone:			В	By Alan S. Bachman, Ass	





### **Division of Facilities Construction and Management**

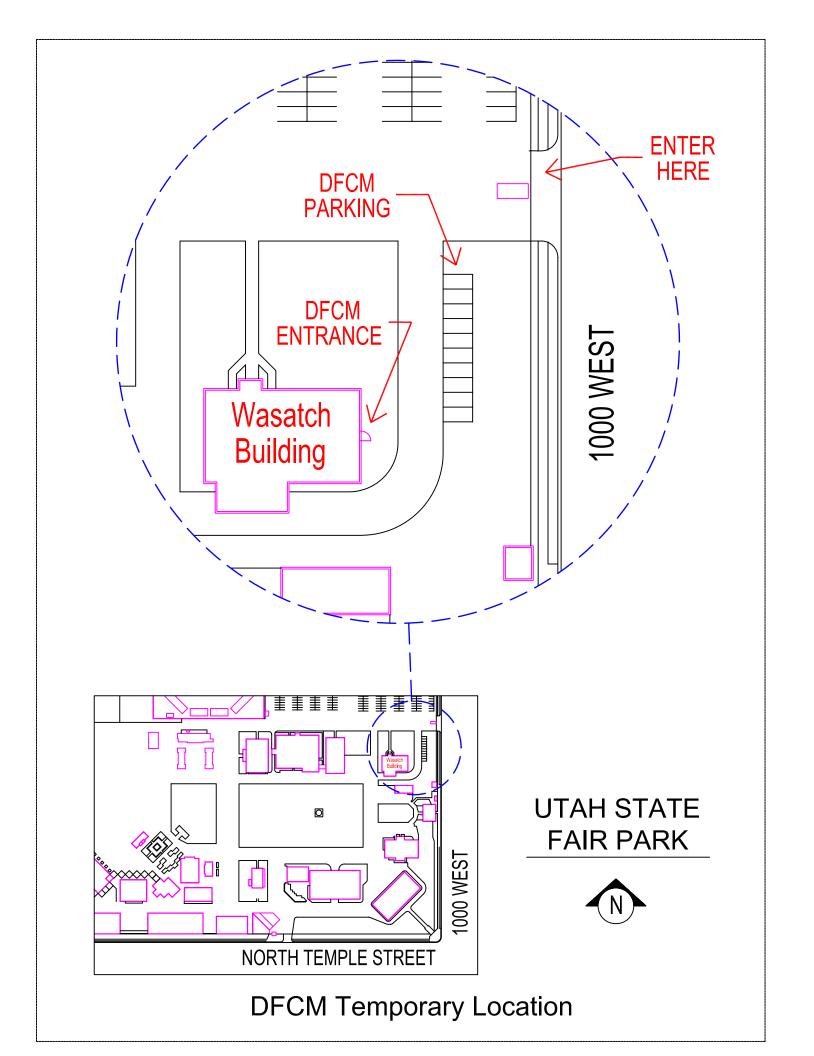
**DFCM** 

### CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT		PROJECT NO:
AGENCY/INSTITUTION		
AREA ACCEPTED		
Completed as defined in the General C accordance with the Contract Documents,	onditions; as modifie	has been reviewed on this date and found to be Substantially including that the construction is sufficiently completed in ed by any change orders agreed to by the parties, so that the State the Project for the use for which it is intended.
		the Project as Substantially Complete and will assume full oject at (date).
		rees to assume full responsibility for maintenance and operation, ct to the itemized responsibilities and/or exceptions noted below:
		ed hereto. The failure to include an item on it does not alter the Work in accordance with the Contract Documents, including
The Contractor shall complete or correct to		on the list of items appended hereto within  Certificate. The amount withheld pending completion of the list
CONTRACTOR (include name of firm)	by:	DATE
A/E	by:	DATE
USING INSTITUTION OR AGENCY	by:	DATE
	by:	
DFCM		DATE

cc: Parties Noted DFCM, Director

DFCM FORM 5b-2 062107





# Design/Build RFP **Driver License Division & Department of Motor Vehicles Joint Facility**Draper, Utah

DFCM No 07037550

June 21, 2007

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Design Build Stage II

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Individual Space Criteria - DLD, DMV, Shared Spaces

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- F DFCM Design Process
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### SECTION I - RFP

See RFP from DFCM Website



### **SECTION II - FACILITY PROGRAM**

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Site Affinity Diagram
Space List
Symbol Key
Individual Space Criteria - DLD, DMV, Shared Spaces

### **ACKNOWLEDGMENTS**

#### **Acknowledgments:**

Harris & Associates would like to thank the following individuals who contributed to this study:

Dave McKay, DFCM
Alyn Lunceford, DFCM
Stephen Sendobry, DFCM
Brad Simpson, Department of Motor Vehicles
Stacey Hammond, Department of Motor Vehicles
Nannette Rolfe, Driver License Division
Wally Wintle, Driver License Division
Jill Laws, Driver License Division
Vinn Roos, Driver License Division
Christopher Caras, Driver License Division

#### INTRODUCTION

#### Introduction

This study is a facility program for a new state Driver License Division & Department of Motor Vehicles Joint Facility in Draper, Utah. The work product was contract by the Division of Facilities Construction and Management (DFCM) of the State of Utah with Harris & Associates Salt Lake City office. The new facility will include space for the both the Driver License Division and the Division of Motor Vehicles (DLD+DMV) including associated site requirements.

#### **Project Methodology**

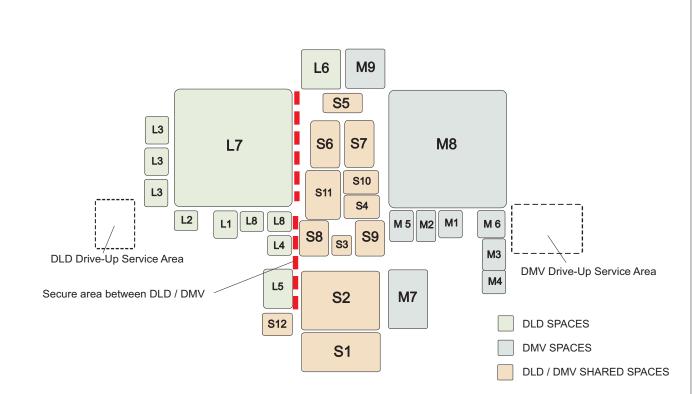
The process for establishment of this work product consisted of first meeting with a representative of DFCM to gain general guidance and scope for the work. The work was further developed by meeting with each group of state agencies that will occupy the facility to gain a better understanding of their needs and special requirements. Site visits were made to study the site. After this information was gathered, a draft program of spaces, space diagrams, massing studies and affinity diagrams were developed. This draft was presented to DFCM and to each agency that will occupy the facility. The components of the study were carefully reviewed and changes made to meet the needs of each agency. All parties involved in the review and resulting changes agreed to the final work product. Please refer to the signature approval page in the front of this document.

#### **Document Organization**

This document is organized as a guide to developing a new DLD+DMV facility. The study is organized into three major sections: the RFP, the Facility Program, and an Appendices section. Guidelines and character of the facility and site are discussed in the Facility Program Section. Guidelines for Design Build contract, schedule and selection are contained in the RFP section. The Appendices contain information that augments the items discussed in the RFP and the Facility Program.



### **FACILITY AFFINITY DIAGRAM**



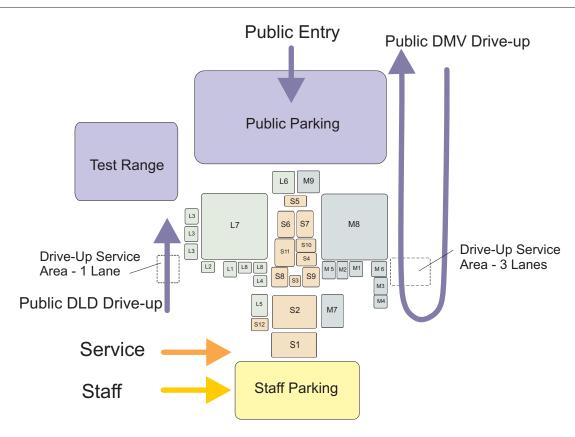
### **AFFINITY DIAGRAM**

#### **DIAGRAM KEY**

No.	SPACE DESCRIPTION	W	L	<b>Total NSF</b>	
L1	Supervisor's Office	12	13	156	ם ום
L2	Assistant Supervisor's Office	10	12	120	
L3	Hearing Offices	12	13	156	
L4	Accounting Office	10	12	120	
L5	Storage Room	20	15	300	
L6	Vestibule/Lobby Area	20	20	400	
L7	Customer Service Area	50	80	4,000	
L8	Office Specialists Offices	10	12	120	

No.	SPACE DESCRIPTION	W	L	Total NSF	
S1	Staff Break Room (60 half-lockers)	32	22	704	
S2	Conference / Training Room (Dividable)	30	40	1,200	Z
S3	Janitorial Closet	10	10	100	
S4	Telephone/IT Room	14	18	252	7
S5	Public Vending Area	10	20	200	ММО
S6	Public Restrooms - Men (10)	10	36	360	≥
S7	Public Restrooms - Women (12)	10	36	360	$\circ$
S8	Staff Restrooms-Men (6)	10	26	260	Ŏ
S9	Staff Restrooms-Women (6)	10	26	260	
S10	Electrical Room	12	18	216	
S11	Mechanical Room	20	25	500	
S12	Loading Dock	15	20	300	

No.	SPACE DESCRIPTION	W	L	Total NSF	
					DMAY /
M1	Manager Office	12	13	156	DMV
M2	Assistant Work Area	10	16	160	
M3	Money Counting Room	12	16	192	
M4	Deposit Prep Room	12	12	144	
M5	Dealer Service Area	16	16	256	
M6	Drive Thru Service Area Office	14	14	196	
M7	Storage Room	20	35	700	
M8	Customer Service Area	50	80	4,000	
M9	Queuing and Lobby Area (incl. Q desk)	20	20	400	



#### SITE AFFINITIES & CIRCULATION

#### **Site Considerations**

The site for this project is located east of the State Prison in Draper, Utah. The site is a northwest facing site with an approximate 30'-0" drop in topography from south to north. The site is located east of the I-15 frontage road (Minuteman Drive) in the area of Sivogah Court (14525 South). The site is divided by Sivogah Court Street in the lower 1/3 of the site. Please refer to the survey included in Appendix C for more information.

#### Site requirements are:

- 1. Public Parking 340 cars and Staff Parking 60 cars, with separate drive entry.
- 2. Two drive-up service windows: DLD two car capacity; DMV three rows, 30-car capacity. Drive-up traffic will not cross public parking circulation and have separate entry/exit points.
- 3. Provide a separate entry for staff and public.
- 4. Test range 230'-0" x 130'-0"
  - a. Motorcycle testing range
  - b. Commercial Driver testing range plan on fully loaded semi trucks
- 5. Single loading dock area; can be accessed via staff parking area.
- 6. Pole mounted interior illuminated double-sided exterior sign. Needs to be located for high visibility on frontage road in either direction. Sign design needs to be coordinated with DLD+DMV. Design Build team to locate, provide power and on/off switch in Building.
- 7. Site furniture: trash/cigarette containers at all entry points; bike rack for seven bikes at public and staff entries; pedestrian seating for three at staff and public entry; and 30' flag pole at the public entry.

	No.	SPACE DESCRIPTION	W	L	Total NSF	No. Spaces	SubNSF	FACTOR	GSF
LD	L1	Supervisor's Office	12	13	156	1	156	1.33	208
	L2	Assistant Supervisor's Office	10	12	120	1	120	1.33	160
	L3	Hearing Offices	12	13	156	3	468	1.33	624
	L4	Accounting Office	10	12	120	1	120	1.33	16
	L5	Storage Room	20	15	300	1	300	1.33	40
	L6	Vestibule/Lobby Area	20	20	400	1	400	1.33	53
	L7	Customer Service Area	50	80	4,000	1	4,000	1.33	5,33
	L8	Office Specialists Offices	10	12	120	2	240	1.33	32
		Subtotal DLD					5,804		7,73
ROUP	No.	SPACE DESCRIPTION	W	L	Total NSF	No. Spaces	SubNSF	FACTOR	GSF
MV	M1	Manager Office	12	13	156	1	156	1.33	20
	M2	Assistant Work Area	10	16	160	1	160	1.33	21
-		Money Counting Room	12	16	192	1	192	1.33	25
	M4	Deposit Prep Room	12	12	144	1	144	1.33	19
	M5	Dealer Service Area	16	16	256	1	256	1.33	34
	M6	Drive Thru Service Area Office	14	14	196	1	196	1.33	26
	M7	Storage Room	20	35	700	1	700	1.33	93
	M8	Customer Service Area	50	80	4,000	1	4,000	1.33	5,33
-	M9	Queuing and Lobby Area (incl. Q desk)	20	20	400	1	400	1.33	53
		Subtotal DMV					6,204		8,27
ROUP	No.	SPACE DESCRIPTION	W	L	Total NSF	No. Spaces	SubNSF	FACTOR	GSF
	S1	Staff Break Room (60 half-lockers)	32	22	704	1	704	1.33	93
OMMON		otali break Room (oo hali-lockers)	J2		707	'	707	1.00	
OMMON		Conference / Training Room (Dividable)	30	40	1 200	1	1 200	1 33	1 60
OMMON	S2	Conference / Training Room (Dividable)	30 10	40	1,200 100	1	1,200 100	1.33	
OMMON	S2 S3	Janitorial Closet	10	10	100	1	100	1.33	13
OMMON	S2 S3 S4	Janitorial Closet Telephone/IT Room	10 14	10	100 252	1 1	100 252	1.33 1.33	13 33
OMMON	S2 S3 S4 S5	Janitorial Closet Telephone/IT Room Public Vending Area	10 14 10	10 18 20	100 252 200	1 1 1	100 252 200	1.33 1.33 1.33	13 33 26
OMMON	S2 S3 S4	Janitorial Closet Telephone/IT Room Public Vending Area Public Restrooms - Men (10)	10 14	10	100 252	1 1	100 252	1.33 1.33	13 33 26 48
OMMON	S2 S3 S4 S5 S6	Janitorial Closet Telephone/IT Room Public Vending Area	10 14 10 10	10 18 20 36	100 252 200 360	1 1 1 1	100 252 200 360	1.33 1.33 1.33 1.33	13 33 26 48 48
OMMON	S2 S3 S4 S5 S6 S7	Janitorial Closet Telephone/IT Room Public Vending Area Public Restrooms - Men (10) Public Restrooms - Women (12) Staff Restrooms-Men (6)	10 14 10 10 10	10 18 20 36 36	100 252 200 360 360	1 1 1 1	100 252 200 360 360	1.33 1.33 1.33 1.33 1.33	13 33 26 48 48 34
	\$2 \$3 \$4 \$5 \$6 \$7 \$8 \$9	Janitorial Closet Telephone/IT Room Public Vending Area Public Restrooms - Men (10) Public Restrooms - Women (12)	10 14 10 10 10 10	10 18 20 36 36 26	100 252 200 360 360 260	1 1 1 1 1 1	100 252 200 360 360 260	1.33 1.33 1.33 1.33 1.33 1.33	13 33 26 48 48 34 34
	\$2 \$3 \$4 \$5 \$6 \$7 \$8 \$9	Janitorial Closet Telephone/IT Room Public Vending Area Public Restrooms - Men (10) Public Restrooms - Women (12) Staff Restrooms-Men (6) Staff Restrooms-Women (6)	10 14 10 10 10 10 10	10 18 20 36 36 26 26	100 252 200 360 360 260 260	1 1 1 1 1 1 1	100 252 200 360 360 260 260	1.33 1.33 1.33 1.33 1.33 1.33 1.33	13 33 26 48 48 34 34
	\$2 \$3 \$4 \$5 \$6 \$7 \$8 \$9 \$10	Janitorial Closet Telephone/IT Room Public Vending Area Public Restrooms - Men (10) Public Restrooms - Women (12) Staff Restrooms-Men (6) Staff Restrooms-Women (6) Electrical Room	10 14 10 10 10 10 10 10	10 18 20 36 36 26 26 18	100 252 200 360 360 260 260 216	1 1 1 1 1 1 1 1	100 252 200 360 360 260 260 216	1.33 1.33 1.33 1.33 1.33 1.33 1.33 1.33	1,60 13 33 26 48 48 34 34 28 66

#### SYMBOL KEY:

⊕ : Wall 4-plex Power Outlet

☐ : Floor Duplex Power Outlet

(III) : Floor 4-Plex Outlet - 2 Voice / 2 Data

=: Flatscreen Computer Monitor (NIC)

: Computer Keyboard (NIC)

: Telephone w/ Answering Machine

: Desktop Printer (NIC)

: Task Chair, with Arms

: Task Chair, Armless

: Stacking Chair, Armless

: Modular Office Desk

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Sup	ervisor's Office		

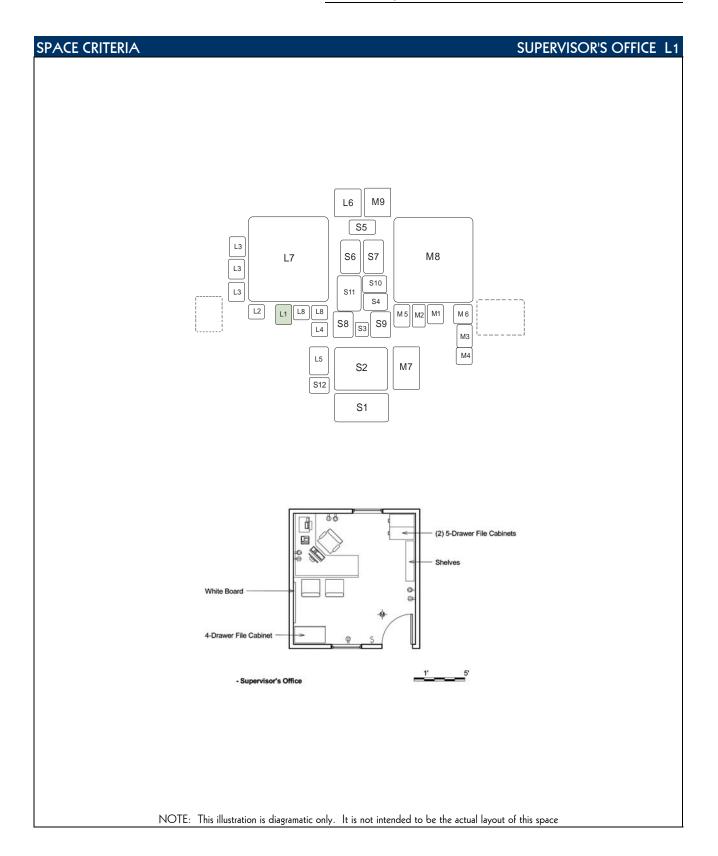
### SPACE CRITERIA SUPERVISOR'S OFFICE L1

NO		ITEA 4		NOTE
NO.	$\overline{\mathbf{Q}}$	ITEM	Ø	NOTE
		C T		
1	X	Space Type		Open Modular furniture 🗵
		<u> </u>	X	Fixed - private
2	X	Function	X	Supervise employees. Assist customers, needs access to public, including window to view
	[D]	11 (0 :: 14   5:1	[7]	F 700 T (00 D 14 F
3	LŽI	Hours of Operation: Monday-Friday	$\square$	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
4	[V]	Size		Facility Standard Width: 12
4		Size		Length: 13
				Area: 156
5	X	Ceiling height		Height from floor: 10ft
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
0		Celling type		Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Other Direct Fluorescence
,		Lighting		Indirect Fluorescence
			$\boxtimes$	Day Lighting Needs a window
				Special
8	X	Number of Occupants	<del></del>	Number: 1
9	×	Number of Visitors		Number: 2-3
10		Security		None
	تت	Different hours than DMV-secure each facility.	×	Other: Motion sensors
		Different flours than DIVIV secure each racinty.		Otto: Model Schools
11	X	Equipment Not In Contract (NIC)		Computer
				Printer
12	X	Equipment in Construction Contract		Locking door - push button.
				Window to view public.
				·
13	X	Power Outlets	X	Number of Standard duplex outlets: $4 = $ one on each wall
14		Special Power		Special outlets and voltage:
15	X	Furniture	X	Work Chair - Number: 1 Size:
			X	Side Chair - Number 3 Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
			X	File - Types: Vertical Number: 2 Size: 5 drawer
			X	File - Types: Lateral Number: 1 Size: 4 drawer
				File - Types: Number: Size:
				Other:
			X	Modular furniture.
			X	Open shelf - 3 shelves, 4ft. X 3 ft.

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Sup	ervisor's Office		

SPA	CE	CRITERIA		SUPERVISOR'S OFFICE L1
NO.	$\overline{\mathbf{Q}}$	ITEM		NOTE
16		Floor Finish	X	Carpet
	_	100.1111011		Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18	X	Millwork (type and length)		None
		rail only on wall adjacent to guest chairs, to		Type: Length:
	meası	ire up with chair size		Type: Length:
				Type: Length:
				Type: Length:
19	X	Telephone	X	Number of Outlets: 3
			X	Number of Handset: 1 NIC: □
				Special:
20	X	Data	X	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
				Special power:
21	X	Audio Visual		None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
			X	White Boards - Size: 3 x 4 Number: 1
				Other:
22	Ш	Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
0.2	[FZ]	A 1 C 1		C. 1 1
23	N.	Acoustical Control		Standard Sta
			X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
24		Other Requirements		
۷4		Other Requirements		
			-	

Space Name: Supervisor's Office



AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Ass	sistant Supervisor's Office		

CDA	CE	CRIT	CD1	Δ
JF/	CE	CNII		$\overline{}$

#### ASSISTANT SUPERVISOR'S OFFICE L2

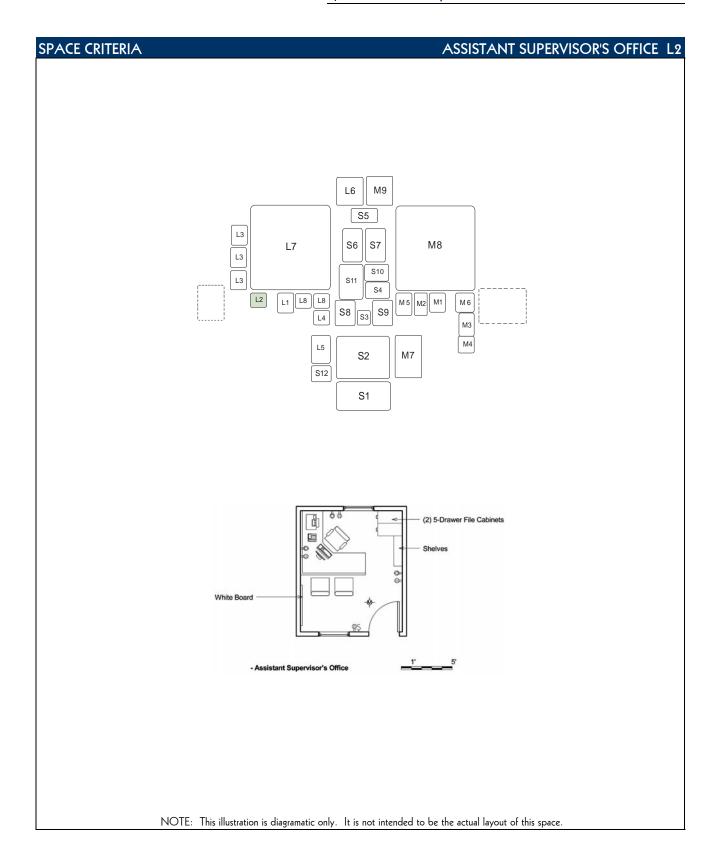
NO.		ITEM	$\overline{\checkmark}$	NOTE
1	X	Space Type		Open Modular furniture 🗵
			X	Fixed - private
2	X	Function	X	Assist employees & customer stations; needs access to public, including window to view
3	X	Hours of Operation: Monday-Friday	$\boxtimes$	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
	_	<u> </u>		Facility Standard
4	X	Size		Width: 10
				Length: 12
		Ceiling height		Area: 120 Height from floor: 10ft
5 6	X	Ceiling type	X	Acoustical Lay-In Ceiling
0		Ceiling type		Sheet Rock
				Open to Structure
				Other
7	[X]	Lighting		Direct Fluorescence
		Lighting	×	Indirect Fluorescence
			×	Day Lighting Needs a window
				Special
8	X	Number of Occupants		Number: 1
9	×	Number of Visitors		Number: 2-3
10	×	Security		None
		Different hours than DMV-secure each facility.	X	Other: Motion sensors
		,		
11	X	Equipment Not In Contract (NIC)		Computer
				Printer
12	X	Equipment in Construction Contract		Locking door - push button.
				Window to view public.
13	X	Power Outlets	X	Number of Standard duplex outlets: $4 = $ one on each wall
14		Special Power		Special outlets and voltage:
		_		
15	X	Furniture	×	Work Chair - Number: 1 Size:
			X	Side Chair - Number 3 Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
			[D]	Tables - Type: Number: Size:
			X	File - Types: Vertical Number: 2 Size: 5 drawer
				File - Types:         Number:         Size:           File - Types:         Number:         Size:
				File - Types: Number: Size:  Other:
				Other.
			X	Modular furniture.
			×	Open shelf - 4 shelves; 6ft. X 3 ft.
			(4)	Open shell - 4 shelves) Oit. A 3 it.

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: As	sistant Supervisor's Office		

SPACE CRITERIA	ASSISTANT SUPERVISOR'S OFFICE LS

NO.	$\overline{\mathbf{A}}$	ITEM	$\overline{\mathbf{Q}}$	NOTE
16		Floor Finish	X	Carpet
				Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18	X	Millwork (type and length)		None
		rail only on wall adjacent to guest chairs, to		Type: Length:
		ire up with chair size		Type: Length:
				Type: Length:
				Type: Length:
19	X	Telephone	X	Number of Outlets: 3
			X	Number of Handset: 1 NIC:
				Special:
20	X	Data	X	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
				Special power:
21	X	Audio Visual		None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
			X	White Boards - Size: 3 x 4 Number: 1
				Other:
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
		1.0		
23	X	Acoustical Control		Standard Sta
			X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
0.4				
24		Other Requirements		

Space Name: Assistant Supervisor's Office



AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: He	aring Offices		

### SPACE CRITERIA HEARING OFFICES L3

NO.	$\overline{\square}$	ITEM	V	NOTE
1	X	Space Type		Open Modular furniture 🗵
		T	X	Fixed - private
2	X	Function	X	Hearings re: suspended, revoking, suspended Driver's Licenses.
3	X	Hours of Operation: Monday-Friday	X	From: 8:00 a.m. To: 5:00 p.m. Days: M - F
		risas er operationi ritenary rinary		Facility Standard
4	X	Size		Width: 12
				Length: 13
				Area: 156
5	X	Ceiling height		Height from floor: 10 ft.
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
			$\boxtimes$	Indirect Fluorescence
			$\boxtimes$	Day Lighting One outside window preferred.
	-	N 1 (O		Special
8	X	Number of Occupants		Number: 1 Number: 5 or 6
9	X	Number of Visitors Security		None
10		*All hearing offices must be Soundproofed.		Other: Motion sensors
		Different hours than DMV-secure each facility.	<u> </u>	Need small window to hallway for safety issues / view inside.
11	X	Equipment Not In Contract (NIC)		Computer
		Equipment ( vot m contract ( vve)		Printer
12	X	Equipment in Construction Contract		Need small window to hallway for safety issues / view inside.
13	X	Power Outlets	X	Number of Standard duplex outlets: 4 = one on each wall
14		Special Power		Special outlets and voltage:
1 -	[V]	E	ᄓ	Wed Chin Neutro 1
15	X	Furniture	X X	Work Chair - Number:         1         Size:           Side Chair - Number:         5         Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
			X	File - Types: Vertical Number: 1 Size: 4 drawer
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
			X	Modular furniture.
			ì	

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: He	aring Offices		

SPA	CE CRITERIA		HEARING OFFICES L3
NO.	☑ ITEM	Ø	NOTE
16		X	Carpet
		П	Vinyl Tile

		1,012
16 🗵 Floor Finish	$\boxtimes$	Carpet
		Vinyl Tile
		Ceramic Tile
		Sealed Concrete
		Other:
17 🗵 Base Finish	X	Rubber
		Wood
		Tile
		Other:
18 🗵 Millwork (type and length)		None
Chair rail only on wall adjacent to guest chairs, to		Type: Length:
measure up with chair size		Type: Length:
		Type: Length:
		Type: Length:
19 🗵 Telephone	X	Number of Outlets: 3
	×	Number of Handset: 1 NIC:
		Special:
		Ороски
20 🗵 Data	X	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
20 000		Special power:
		opecial periori
21	X	None
		Built In Video Projector
		Projector Screen Power: □ Manual: □
		White Boards - Size: Number:
		Other:
22 D Special HVAC Requirements	X	Standard
Put thermostat in hallway; not individual rooms.		Special Temperature Range:
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Special Humidity Range:
		Special Operating Times: Hours: Days:
		Other:
23 🗵 Acoustical Control		Standard
	X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
24  Other Requirements		Provide a small side window beside office door for protection - view inside.
		·
	-	
	-	
	-	

Space Name: Hearing Offices

SPACE CRITERIA	HEARING OFFICES L3
L6     M9       S5	
L7 S6 S7 M8	
L3 S10 S11	
L2 L1 L8 L8 Q2 M5 M2 M1 M6	
L4 S8 S3 S9 M4	
S12 S2 M7	
S1	
4-Drawer File Cabinet	
- Hearing Offices5	
NOTE: This illustration is diagramatic only. It is not intended to be the actual layout of this	space.

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Acc	ounting Office		

ACCOUNTING OFFICE LA

NIO		ITEN 4		NOTE
NO.	$\overline{Q}$	ITEM	$\square$	NOTE
	_		_	_
1	×	Space Type		Open Modular furniture 🗵
_	-	<u> </u>	X	Fixed - private
2	X	Function	X	Secure money; control documents; financial responsibilities.
2	[D]	11 (0 :: 14   F:1	[27]	[ 700
3	N.	Hours of Operation: Monday-Friday		From: 7:00 a.m. To: 6:00 p.m. Days: M - F Facility Standard
4		Size	ш	Width: 10
4		Size		Length: 12
				Area: 120
5	X	Ceiling height		Height from floor: 10 ft.
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
0		Celling type		Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
,			X	Indirect Fluorescence
				Day Lighting - No outside window.
				Special
8	X	Number of Occupants		Number: 1
9	X	Number of Visitors		Number: 1
10	X	Security		None
		Different hours than DMV-secure each facility.	X	Other: Motion sensors
				Secured lock; key only
11	X	Equipment Not In Contract (NIC)		Computer
				Printer
				Money Safe
12	X	Equipment in Construction Contract		
13	×	Power Outlets	X	Number of Standard duplex outlets: 4 = one on each wall
14		Special Power		Special outlets and voltage:
1 -	157	Γ	[27]	Work Chair - Number: 1 or 2? Size:
15	X	Furniture	X	Work Chair - Number: 1 or 2?         Size:           Side Chair - Number 2         Size:
				Other Chairs - Type: Number: Size:
		Does space need to accommodate 1 or 2 staff?		Other Chairs - Type: Number: Size:  Other Chairs - Type: Number: Size:
		poes space need to accommodate 1 of 2 staff!		Tables - Type: Number: Size:
				Tables - Type: Number: Size:
			X	File - Types: Vertical Number: 1 Size: 4 drawer
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
				***
			X	Modular furniture.

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Acc	ounting Office		

SPA	CE	CRITERIA		ACCOUNTING OFFICE L4
NO		ITEM		NOTE
NO. 16		Floor Finish	X	Carpet
10		Floor Finish		Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
				Other:
17	[V]	Base Finish	[27]	Rubber
17	X	Dase Finish	X	
				Wood
				Tile
				Other:
10	[V]	AA:II I (. II .IX		N
18	Class	Millwork (type and length)		None
		rail only on wall adjacent to guest chairs, to		Type: Length:
	meası	re up with chair size		Type: Length:
				Type: Length:
				Type: Length:
10		T.I. I	X	Number of Outlets: 3
19	X	Telephone		Number of Handset: 1 NIC:
				Special:
				Special:
00	X	Data	☑	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
20		Data	X	
				Special power:
0.1		Audio Visual	X	None
21	ш	Audio v Isuai		Built In Video Projector
				Projector Screen Power:   Manual:
				White Boards - Size: Number:
				Other:
22	_	Special HVAC Requirements	X	Standard Standard
22	ш	Special HVAC Requirements		
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days: Other:
				Other:
23		Acoustical Control		Standard
23	ш	Acoustical Control	X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
				Special: Sound proof walls: Assign 3.1.C. Kating 50-33
24		Other Requirements	1	1
24		Other Requirements		

Space Name: Accounting Office

SPACE CRITERIA ACCOUNTING OFFICE LA
L6 M9
S5 S5
L7 S6 S7 M8
L2 L1 L8 L8
S12 S2 M7 M4
S1
Money Safe (NIC) 4-Drawer File Cabinet
- Accounting Offices5
NOTE: This illustration is diagramatic only. It is not intended to be the actual layout of this space.

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Stor	rage Room		

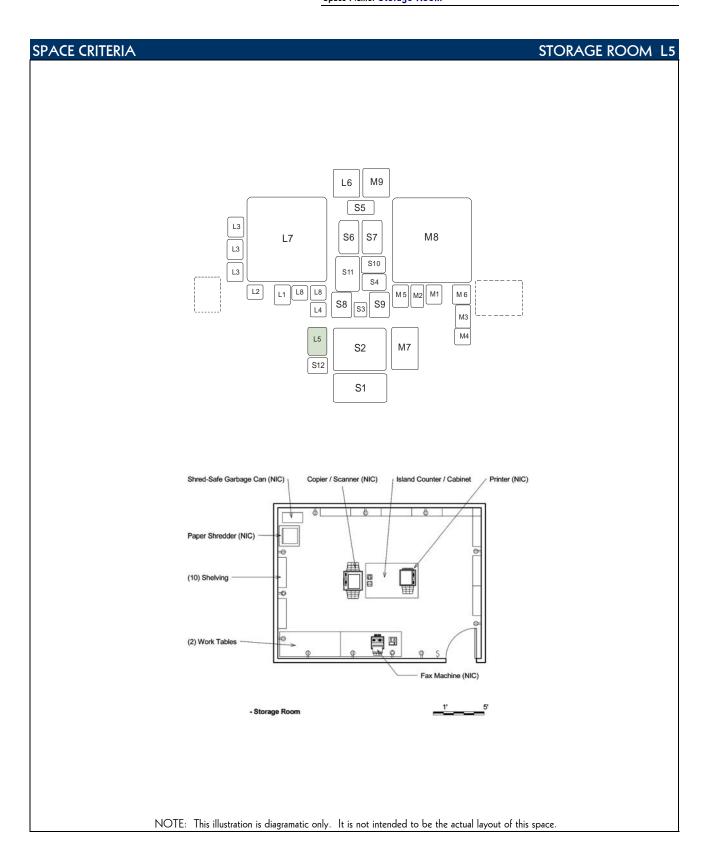
OOM L5

NO.	$\overline{\square}$	ITEM	Ø	NOTE		
1	X	Space Type		Open Modular furniture		
		r	X	Fixed		
2	X	Function	X	Copying + Faxing + Mailing room  Stores office supplies + paper		
3	[X]	Hours of Operation: Monday-Friday	X	From: 7:00 a.m. To: 6:00 p.m. Days: M - F		
		Tious of Operation. Wollday-Inday		Facility Standard		
4	X	Size	_	Width: 20		
				Length: 15		
				Area: 300		
5	X	Ceiling height		Height from floor: 10 ft		
6	X	Ceiling type	X	Acoustical Lay-In Ceiling		
				Sheet Rock		
				Open to Structure		
				Other		
7	X	Lighting	$\boxtimes$	Direct Fluorescence		
				Indirect Fluorescence		
				Day Lighting		
0		Number of Occupants		Special Number:		
9	<u></u>	Number of Occupants  Number of Visitors		Number:		
10		Security		None.		
10		Different hours than DMV-secure each facility.	×	Other: Storage room locked up at night.		
		2 merent hears than 2 mm secare each racinty.		Chart Cloude room located up at mg.tt.		
11	X	Equipment Not In Contract (NIC)		Copier machine (floor and table top versions)		
				Fax machine		
				Scanners		
				Shredder and Shred-safe garbage cans		
12	X	Equipment in Construction Contract		Millwork for cabinets.		
4.0	-		-			
13	X	Power Outlets	X	Apprx. 10 duplex outlets along each wall; some at countertop height and on walls.		
14	X	Special Power		Special outlets and voltage:		
				Copiers (2) - designaged 20 amp breaker		
15	X	Furniture		Work Chair - Number: Size:		
, 0		· amitaic		Side Chair - Number: Size:		
				Other Chairs - Type: Number: Size:		
				Other Chairs - Type: Number: Size:		
				Tables - Type: Number: Size:		
				Tables - Type: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				Other:		
			X	Built-in cabinets, countertops		

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Stor	rage Room		

SPA	CE	CRITERIA		STORAGE ROOM L
NO.	$\overline{\mathbf{Q}}$	ITEM		NOTE
16		Floor Finish	X	Carpet
10		11001 1 1111311		Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
				Oue.
17	X	Base Finish	X	Rubber
• •		Date i mish		Wood
				Tile
				Other:
				Oue.
18	N	Millwork (type and length)		None
10	-	Trillwork (type and length)	X	Type: Wall cabinets Length: 2 x 11
			X	Type: Countertops Length: 24' x 11 ft.
			X	Type: Island Length: 3' 6" x 5' 2"
			X	Type: Shelves Length: 2-1/2 ft. x 6 ft.
			X	Shelving access from both sides of island.
				Shelving access from both sides of Island.
19		Telephone	X	Number of Outlets: 3
19	X	Telephone	× ×	Number of Outlets: 3  Number of Handset: 1  NIC:
				Special: 1 Fax Machine
00	[V]	D .		N   (O   1   2 - 4   1   0   1   0   1
20	X	Data	X	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
				Special power:
0.1		Audio Visual		N1
21		Audio Visual	X	None
				Built In Video Projector  Projector Screen Power:   Manual:
				Other:
00	_	C		
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
		A		
23	Ш	Acoustical Control	X	Standard
				Special:
0 1		O.L. D. :		NI · I
24	X	Other Requirements		No windows.
				DLD had storage room access to stations and staffing areas; thus carpet.
			-	
			-	

Space Name: Storage Room



AGENCY:	DMV 🗆	DLD 🗵	SHARED
Space Name: Ves	tibule / Lobby Area		

CD /		CDI	TED	IΛ
37 <i>/</i>	<b>\CE</b>	CKI	ICK	$\sim$

#### VESTIBULE / LOBBY AREA L6

NO		ITEN 4		NOTE
NO.	✓	ITEM	$\overline{\square}$	NOTE
1	X	Space Type	X	Open
				Fixed - private
2	X	Function	X	Entry into waiting area for customers. Signage to direct customers.
3	X	Hours of Operation: Monday-Friday	X	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
				Facility Standard
4	X	Size		Width: 20
				Length: 20
				Area: 400
5	X	Ceiling height		Height from floor: 10 ft
6	X		X	Acoustical Lay-In Ceiling
		V 71 -		Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
	لتن	Lighteng	$\boxtimes$	Indirect Fluorescence
			X	Day Lighting
				Special Special
0	◡	Number of Ossus sate		
8	N N	Number of Occupants		Number: Varies
9	X	Number of Visitors		Number: Varies
10	X	Security DAM ( ) ( )		None:
		Different hours than DMV-secure each facility.	×	Other: Motion sensors
	_	F	X	Bubble cameras + security cameras.
11	X	Equipment Not In Contract (NIC)		
12	X	Equipment in Construction Contract		
				Handicap automatic push door openers
13	X	Power Outlets	X	Number of Standard duplex outlets: 2
14		Special Power		
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
1				

AGENCY:	DMV 🗆	DLD 🗵	SHARED □
Space Name: Vest	tibule / Lobby Area		

SPA	CE	Criteria		VESTIBULE / LOBBY AREA L6
NO.	$\overline{\mathbf{Q}}$	ITEM	$\square$	NOTE
16		Floor Finish		Carpet
10		11001 1 1111311		Vinyl Tile
			$\boxtimes$	Ceramic Tile
				Sealed Concrete
				Other:
				Other.
17	X	Base Finish	X	Rubber
.,		Date i ilian		Wood
				Tile
				Other:
				Other.
18	[X]	Millwork (type and length)		None
10		rails only on walls with guest chairs, to measure up		Type: Length:
		chair size.		Type: Length:
	With	51011 312C.		Type: Length:
				Type: Length:
				Type. Length.
19		Telephone		Number of Outlets:
17		Тегерпопе		Number of Handset: NIC:
				Special:
				opecial.
20		Data		Number of Outlets:
		Data		Special Power:
				opedar i over.
21		Audio Visual	X	None
		, tudio + isuai		Built In Video Projector
				Projector Screen Power:   Manual:
				White Boards - Size: Number:
				Other:
				Oute.
22	X	Special HVAC Requirements	X	Standard
		openal TTT to Requirements		Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
			X	Other: Ceiling fans have provided much needed relief. If new A/C can handle it;
				ceiling fans may not be needed.
				thing the may not on house.
23		Acoustical Control	X	Standard
				Special:
				Ороски
24		Other Requirements	1	
i				

AGENCY:	DMV 🗆	DLD 🗵	SHARED □

Space Name: Vestibule / Lobby Area

SPACE CRITERIA	VESTIBULE / LOBBY A	REA L6
	L6 M9  S5  S6 S7 M8  S11 S10 M5 M2 M1 M6  S12 S2 M7  S11  S11  S12  S12  S12  S12	
<u> </u>	NOTE: This illustration is diagramatic only. It is not intended to be the actual layout of this space.	

AGENCY: DMV □		DLD 🗵	SHARED □
Space Name: Cust	tomer Service Areas		

### SPACE CRITERIA

#### CUSTOMER SERVICE AREA L7

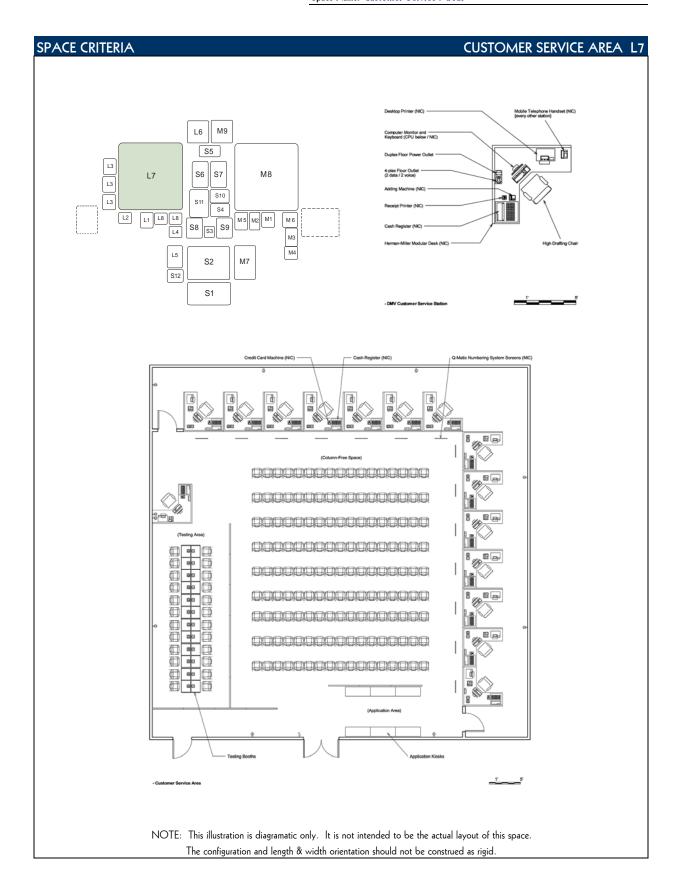
NO.		ITEM	$\square$	NOTE	
1	X	Space Type	X	Open Modular furniture 🗵	
		"L" shape; allows to add space later		Fixed - private	
2	X	Function	X	Stations to service public.	
3	X	Hours of Operation: Monday-Friday	X	From: 7:00 a.m. To: 6:00 p.m. Days: M - F	
				Facility Standard	
4	X	Size		Width: 50	
				Length: 80	
				Area: 4,000	
5	×	Ceiling height		Height from floor: 10 ft	
6	X	Ceiling type	X	Acoustical Lay-In Ceiling	
				Sheet Rock	
				Open to Structure	
				Other	
7	X	Lighting		Direct Fluorescence	
			$\boxtimes$	Indirect Fluorescence	
			$\boxtimes$	Day Lighting - Several outside windows preferred for atmosphere + lighting.	
				Special	
8	×	Number of Occupants		Number: 1 employee at each station	
9	×	Number of Visitors		Number: 60+ customers at any given time; 150 seating.	
10	X	Security		None No panic buttons?	
		Different hours than DMV-secure each facility.	X	Other: Motion sensors	
	_	5 . Al I C . (AllC)		Bubble cameras + security cameras over each station. TV monitors of public viewing.	
11	×	Equipment Not In Contract (NIC)		Herman Miller stations	
				Computer(s) + Printer(s) + Eye Testing Machines	
				TV monitors	
12	X	Equipment in Construction Contract		Cash registers + credit card readers	
12		One Entrance door; need Two Exit doors.		Q-matric numbering system	
		One Littrance door; need 1 wo Exit doors.		Ceiling fans  Handicap automatic push door openers	
				Drinking fountains (2)	
13	X	Power Outlets	X	Each station needs multiple power and data outlets; run through Herman Miller furniture.	
13	لک	1 Owel Juliets	X	Number of Standard duplex outlets: 8 - duplex outlets; 2 each along back walls.	
14	[X]	Special Power	X	Special outlets and voltage: Testing kiosks will need 1 power and 1 data outlet each.	
17	ىن	Openia i Over	نک	opecial outlets and voltage. Testing riosis will need 1 power and 1 data outlet each.	
15	X	Furniture	X	Work Chair - Number: 1 per Intake station Size: High drafting chair	
, ,				Side Chair - Number: Size:	
				Other Chairs - Type: Number: Size:	
				Other Chairs - Type: Number: Size:	
				Tables - Type: Number: Size:	
				Tables - Type: Number: Size:	
			X	File - Types: Filing drawers Number: Size:	
				File - Types: Number: Size:	
				File - Types: Number: Size:	
				Other:	
			X	Herman Miller modular furniture for all stations + testing area.	
			X	Customer waiting chairs (approx. 150)	
			X	Testing area chairs - 25	

AGENCY: DMV □		DLD 🗵	SHARED □
Space Name: Cus	tomer Service Areas		

CUSTOMER SERVICE AREA LT

NO.	$\overline{\mathbf{Q}}$	ITEM	$\square$	NOTE
16	×	Floor Finish	X	Carpet - Behind the customer service stations and to back wall (& into offices.)
10		TIOU TIIISII		Vinyl Tile
			×	Ceramic Tile - Main lobby area with customers.
				Sealed Concrete:
				Other:
17	X	Base Finish		Rubber
				Wood
			×	Tile
				Other:
18	X	Millwork (type and length)		None
	Chair	rails in testing area and public waiting area, none		Type: Length:
		d intake areas - to measure up with chair size		Type: Length:
		·		Type: Length:
				Type: Length:
19	X	Telephone	X	Number of Outlets: 2 per Intake station
			X	Number of Handset: 1 per Intake station NIC:
				Special:
20	X	Data	X	Number of Outlets: 2 outlets on each wall.
			X	Special power: Conduit running through Herman Miller.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards - Size: Number:
				Other:
		C	_	
22	X	Special HVAC Requirements	×	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:  Other: Ceiling fans over lobby operated on light switch. Fans at individual stations
				operated on individual control.
				operated on individual control.
23		Acoustical Control	[X]	Standard
		/ toustical Control		Special:
				оресии.
24	X	Other Requirements		*COLUMN-FREE SPACE*
		Testing Kiosks - 20 each. Need 1 duplex and		Speakers for Q-matic system
		1 data outlet, each.		Public view security monitors
				Extensive security cameras (12)+
				Cameras to capture above each station + testing areas.
				One Entrance door; need Two Exit doors.

Space Name: Customer Service Areas



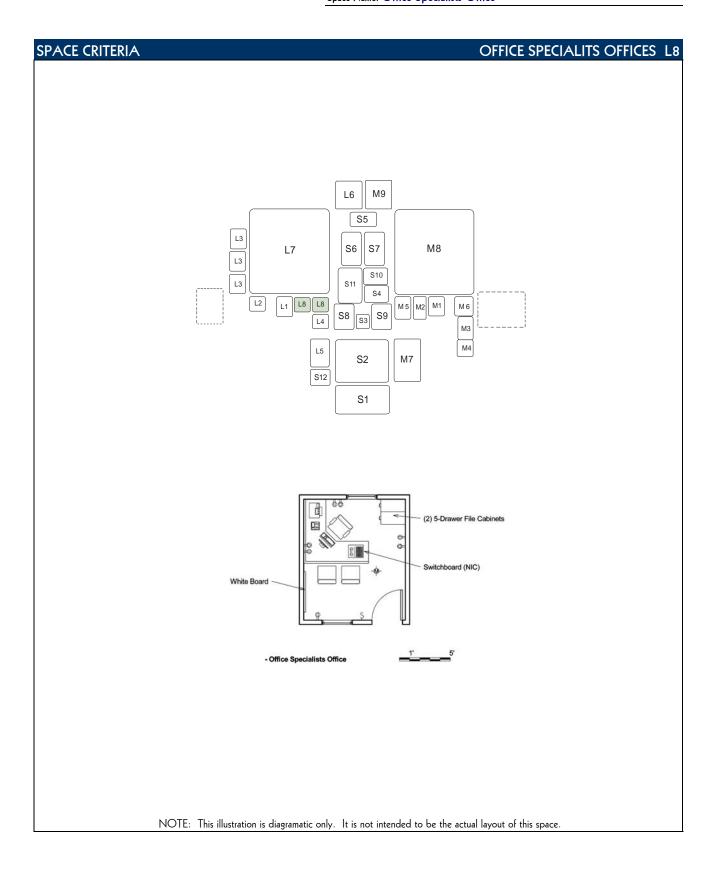
AGENCY: DMV □		DLD 🗵	SHARED □
Space Name: Off	ice Specialists Office		

#### **SPACE CRITERIA** OFFICE SPECIALISTS OFFICES L8 NO. 🗹 ITEM ✓ NOTE Open ■ Space Type Modular furniture 🗵 X Fixed - private 2 Statisical reporting, money reports, switchboard operator. X From: 7:00 a.m. To: 6:00 p.m. Days: M - F 3 ☐ Facility Standard Width: 10 Size Length: 12 Area: 120 Height from floor: 10ft Acoustical Lay-In Ceiling Sheet Rock Open to Structure Other Direct Fluorescence X Indirect Fluorescence X Day Lighting Special ■ Number of Occupants Number: 1 Number of Visitors Number: 1 Security 10 None Different hours than DMV-secure each facility. Other: Motion sensors X ☑ Equipment Not In Contract (NIC) Computer Printer Switchboard Window in all offices. 12 Equipment in Construction Contract 13 🗵 Power Outlets Number of Standard duplex outlets: 4 = one on each wall ☐ Special Power 14 Special outlets and voltage: Nothing special needed for switchboard. ■ Work Chair -15 🗵 Furniture Number: 1 Size: Side Chair -Number 2 Size: Other Chairs - Type: Number: Size: Other Chairs - Type: Number: Size: Tables - Type: Number: Size: Tables - Type: Number: Size: Size: 5 drawer Number: 2 File - Types: Number: Size: File - Types: Size: Number: Other: Modular furniture for space.

AGENCY: DMV □		DLD 🗵	SHARED □
Space Name: Off	fice Specialists Office		

SPACE CRITERIA		OFFICE SPECIALISTS OFFICES L8
NO. ☑ ITEM	V	NOTE
NO. ☑ ITEM  16 ☑ Floor Finish	X	Carpet
10 E3 1100111111311		Vinyl Tile
		Ceramic Tile
		Sealed Concrete
		Other:
17 🗵 Base Finish	X	Rubber
		Wood
		Tile
		Other:
18 🗵 Millwork (type and length)		None
Chair rail only on wall with guest chairs, to measure		Type: Length:
up with chair size		Type: Length:
1		Type: Length:
		Type: Length:
19 🗵 Telephone	X	Number of Outlets: 3
	X	Number of Handset: 2 NIC:
		Special:
20 🗵 Data	X	Number of Outlets: 3 = 4-plex: 2 voice; 2 data
		Special power:
21 ⊠ Audio Visual		None
Z I EST / (ucito visual		Built In Video Projector
		Projector Screen Power:   Manual:
	X	White Boards - Size: 3 x 4 Number: 1
		Other:
22   Special HVAC Requirements	X	Standard
		Special Temperature Range:
		Special Humidity Range:
		Special Operating Times: Hours: Days:
		Other:
23   Acoustical Control		Standard
23 🗀 / (coustical Control		Special: Sound proof walls: Assign S.T.C. Rating 50-55
		opecial. Sound proof walls. 7 Salgit S.T.C. Ratility 30-33
24 Dother Requirements		
,		

Space Name: Office Specialists Office



AGENCY:	DMV 🗵	DLD 🗖	SHARED □
Space Name: Mar	nager's Office		

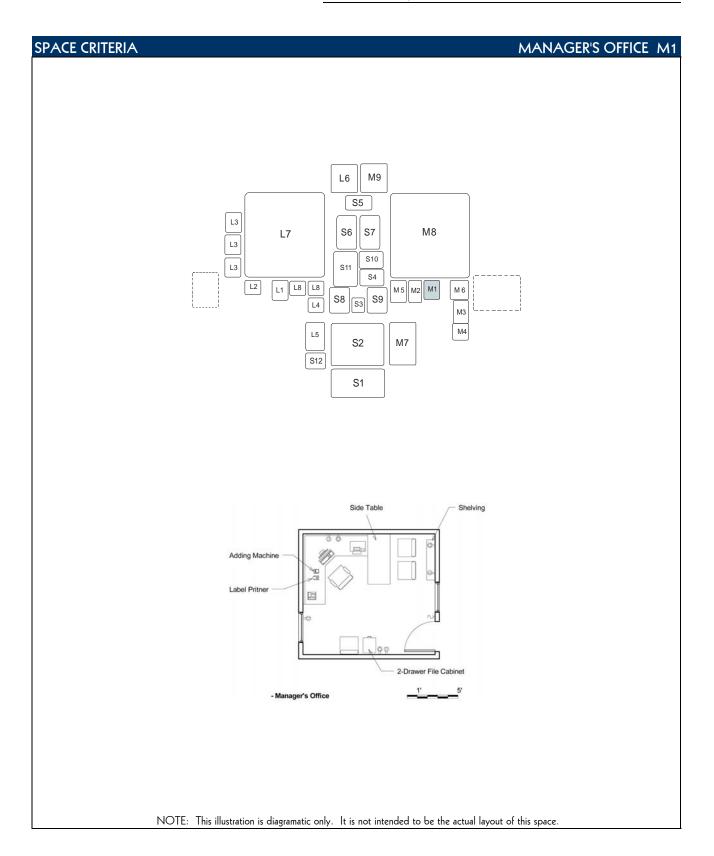
## SPACE CRITERIA MANAGER'S OFFICE M1

NO.		ITEM		NOTE
1	X	Space Type		Open Modular furniture 🗵
			X	Fixed - private
2	X	Function	X	Supervise employees. Assist customers, needs access to public, including window to view
	_	11 (0 )	_	Service counters and lobby area.
3	X	Hours of Operation: Monday-Saturday	$\boxtimes$	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
4	[FZ]	C:		Facility Standard - These hours are public access.
4	LŽI	Size		Width: 12 Length: 13
				Area: 156
5	X	Ceiling height		Height from floor: 10ft
6			X	Acoustical Lay-In Ceiling
0		Celling type		Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
,			X	Indirect Fluorescence
			$\boxtimes$	Day Lighting Needs a window
				Special Special
8	X	Number of Occupants	<del>                                     </del>	Number: 1
9	X	Number of Visitors		Number: 3
10	X	Security		None
		Different hours than DLD-secure each facility.	X	Other: Locked door
		,		
11	X	Equipment Not In Contract (NIC)		Computer + Monitor+ Printer
				Adding machine
				Label printer
				Lateral 3-drawer file
12	X	Equipment in Construction Contract		Locking door - push button.
				Window to view public.
13	$\overline{\mathbf{x}}$	Power Outlets	X	Number of Standard duplex outlets: 4; a duplex on each wall.
14		Special Power		Special outlets and voltage:
1 -	ल	Γ	157	W I CL · N I I I I
15	X	Furniture	X	Work Chair - Number: 1 Size: Side Chair - Number 3 Size:
				Other Chairs - Type:  Number: Size:
				Other Chairs - Type: Number: Size:  Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:  Number: Size:
			X	File - Types: Overhead Number: Size: std.
			X	File - Types: Drawers Number: 1 Size: 3 drawer
				File - Types: Number: Size:
				Other:
			X	Desk - 6ft. modular furniture component, with penisula ~5ft.
			X	Open shelf - 3 shelves; 4ft. X 3 ft.

AGENCY:	DMV 🗵	DLD 🗖	SHARED □
Space Name: Mai	nager's Office		

SPA	CE (	CRITERIA		MANAGER'S OFFICE M1
NO.	Ø	ITEM	Ø	NOTE
16	X	Floor Finish	X	Carpet
				Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
			_	
18		Millwork (type and length)		None
		rails only on walls with guest chairs, to measure up		Type: Length:
	with	chair size.		Type: Length:
				Type: Length: Type: Length:
				Type: Length:
19	X	Telephone	X	Number of Outlets: 3
		Тобриенс	×	Number of Handset: 1 NIC:
				Special:
20	X	Data	X	Number of Outlets: 3 - Voice/Data on 3 walls
				Special power:
21	X	Audio Visual		None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
			X	White Boards - Size: 3 x 4 Number: 1
				Other:
- 00		C :111//ACD :	[FZ]	Standard Standard
22		Special HVAC Requirements	X	
				Special Temperature Range: Special Humidity Range:
				Special Operating Times: Hours: Days:  Other:
				Other.
23	X	Acoustical Control		Standard
			X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
24		Other Requirements		

Space Name: Manager's Office



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Sassa Namar As	eistant Work Area		

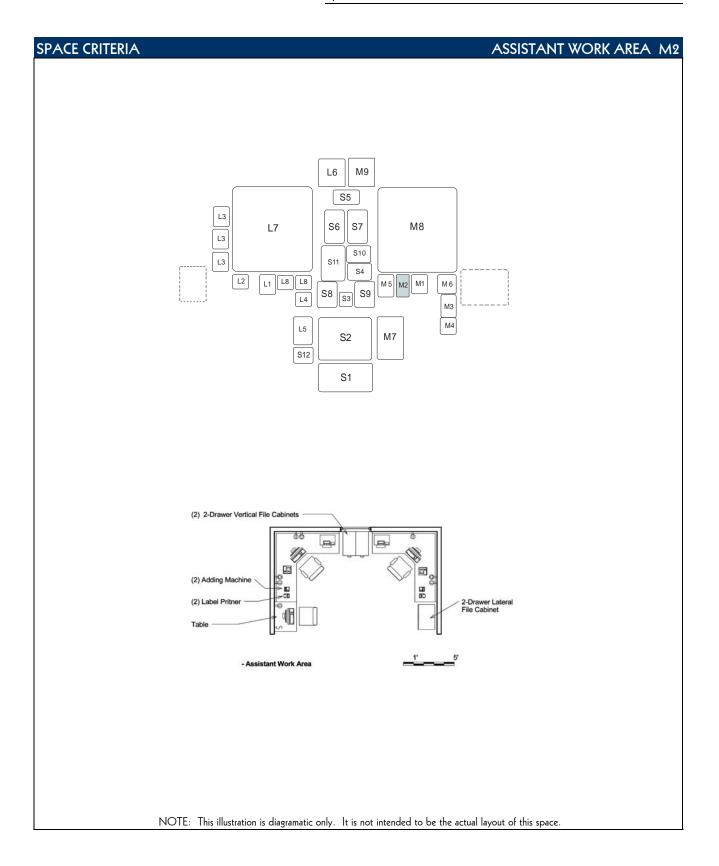
### ASSISTANT WORK AREA M2

NO.	$\overline{\square}$	ITEM	Ø	NOTE
1	X	Space Type	X	Open Modular furniture 🗵
				Fixed - private
2	X	Function	X	Keep counters running+help as needed; answer questions; keep office running efficiently;
				assign inventory and supplies.
3	X	Hours of Operation: Monday-Saturday	<u>×</u>	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
				Facility Standard - These hours are public access.
4	X	Size		Width: 10
				Length: 16
	_	C. t I I		Area: 200
5	×	Ceiling height		Height from floor: 10ft
6	×	Ceiling type	×	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
7	[D]	1.1		Other Dr
7	N.	Lighting		Direct Fluorescence
			X	Indirect Fluorescence
			×	Day Lighting Natural light would be nice.
0		New Level Comments		Special Number: 2
9	X	Number of Occupants Number of Visitors		Number: 0; there will be traffic from CSR(customer service reps) for questions, etc.
10	X	Security	X	None
10		Different hours than DLD-secure each facility.		Other:
		Different flours than DLD-secure each facility.		Other.
11	X	Equipment Not In Contract (NIC)	X	(2) Computers + (2) Monitors + (2) Adding Machines, (2) Label printers
11		Equipment 1 for in Contract (1 frey		Printer (shared?)
			X	Extra computer+keyboard needed for Q-Matic System
				ZANA COMPANIA I ROJSCANA NECACA IO. CLI I MANIE O J. SCAN
12	X	Equipment in Construction Contract	X	
·-				Easy access out to customer service area.
13	X	Power Outlets	X	Number of Standard duplex outlets: 5; a duplex on each wall, 2 on long wall.
14		Special Power		Special outlets and voltage:
15	X	Furniture	X	Work Chair - Number: 2 Size:
				Side Chair - Number: Size:
			X	Other Chairs - Type: Number: 1 Size:
				Other Chairs - Type: Number: Size:
			X	Tables - Type: Number: 1 Size: 24" x 36"
				Tables - Type: Number: Size:
			X	File - Types: Overhead Number: Size: std.
			X	File - Types: Lateral Drawers Number: 1 Size: 2 drawer
				File - Types: Number: Size:
				Other:
			<u>×</u>	Desk - modular furniture component.
			X	2 - 2-drawer vertical file cabinet.
			1	

AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Ass	sistant Work Area		

SPA	CE (	Criteria		ASSISTANT WORK AREA M2
NO.		ITEM	$\square$	NOTE
16		Floor Finish	X	Carpet
10		TIOUT TIIISII		Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
				Otto:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)		None
		rails only on walls with guest chairs, to measure up		Type: Length:
	with	chair size.		Type: Length:
				Type: Length:
				Type: Length:
10	□	T.I., I	$\boxtimes$	Number of Outlets: 4
19	X	Telephone	⊠ ⊠	Number of Handset: 2 NIC:
				Special: Q-Matic system
				Special. Q-Iviatic system
20	X	Data	X	Number of Outlets: 4 - Voice/Data on 3 walls, 2 on long wall
20				Special power: Q-Matic System just needs another outlet
				opecial perior of matter of stelling fact necessition outlier.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards - Size: Number:
				Other:
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
23		Acoustical Control	X	Standard
23	ш	Acoustical Control		Special:
				Special:
24		Other Requirements	1	I
		- 1		

Space Name: Assistant Work Area



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Moi	ney Counting Room		

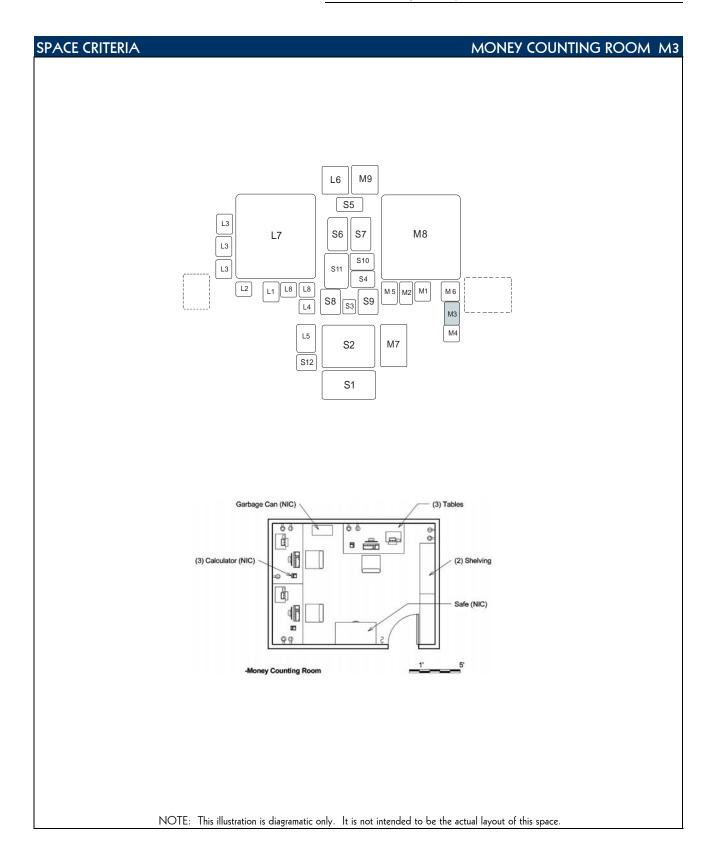
### MONEY COUNTING ROOM M3

NO.	$\overline{\mathbf{A}}$	ITEM	$\square$	NOTE
1	X	Space Type		Open Modular furniture 🗵
			X	Fixed - private
2	X	Function	X	Accessed all throughout day for cash drawers; closing and counting out drawers+deposits;
3	X	Hours of Operation: Monday-Saturday	X	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
				Facility Standard - These hours are public access.
4	X	Size		Width: 12
				Length: 16
				Area: 240
5	X	Ceiling height		Height from floor: 10ft
6	X	Ceiling type		Acoustical Lay-In Ceiling
			X	Sheet Rock - Hard ceiling because of money safe; limit easy roof access.
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
			X	Indirect Fluorescence
				Day Lighting
				Special
8	×	Number of Occupants		Number: 3 computer stations, plus employee's flow/access to safe.
9	×	Number of Visitors		Number: Flow to safe.
10	X	Security		None
		Different hours than DLD-secure each facility.	X	Other: Open to employees all day; locked at night. Locking door.
4.4	-	F . NI L C (AIIC)		Security camera.
11	N.	Equipment Not In Contract (NIC)		3 Computers + 3 Printers + 3 Monitors
				3 Calculators Safe 72"H x 48"W + 26-1/2"D
				Sare / 2           46
12	N	Equipment in Construction Contract		Odlodye cans
12		Equipment in Construction Contract		
13	X	Power Outlets	X	Number of Standard duplex outlets: 6, 1 duplex on each short wall, 2 on each long wall
14		Special Power		Special outlets and voltage:
15	X	Furniture		Work Chair - Number: Size:
			X	Side Chair - Number: 3, with rollers Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
		Need sufficient countertop space to set drawers		Tables - Type: Number: Size:
		onto to count out, and use computer+calculator.		Tables - Type: Number: Size:
				File - Types: Number: Size:
		Use HM for computer stations, 6 ft. work surfaces		File - Types: Number: Size:
				File - Types: Number: Size:
		Need separate table for paperwork drop baskets:		Other:
		could be built in; deep shelving; or extra table.		Safe: 72"H x 48"W + 26-1/2"D

AGENCY:	DMV 🗵	DLD 🗖	SHARED
Space Name: Mo	ney Counting Room		

SPACE CRITERIA		MONEY COUNTING ROOM M3
NO. 🗹 ITEM	$\overline{\mathbf{Z}}$	NOTE
16 🗵 Floor Finish	<u> </u>	Carpet
		Vinyl Tile
		Ceramic Tile
		Sealed Concrete
		Other:
17 🗵 Base Finish	X	Rubber
		Wood
		Tile
		Other:
18 Millwork (type and length)		None: .
Chair rails only on walls with guest chairs, to measure up		Type: Length:
with chair size.		Type: Length:
		Type: Length:
Possible deep set shelves for wire baskets		Type: Length:
10 ET T. I. N. I.		
19 🗵 Telephone - No!		Number of Outlets: Put in wiring for phone outlets for future use. Voice/Data units
		on 3 walls  Number of Handset: NIC:
		Special:
20 🗵 Data	X	Number of Outlets: 6, 2 at each station
ZO 🖾 Data		Special power:
		эресіві ромеі.
21 🗵 Audio Visual		None
		Built In Video Projector
		Projector Screen Power: □ Manual: □
	X	White Boards - Size: 3x4 Number: 1
		Other:
22 Special HVAC Requirements	X	Standard
		Special Temperature Range:
		Special Humidity Range:
		Special Operating Times: Hours: Days:
		Other:
23 Acoustical Control	×	Standard
		Special:
	h 4:	
24 🗵 Other Requirements	Minor	store space for deposit bags; possibly put under work surfaces.

Space Name: Money Counting Room



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Names Der	osit Pren Room		

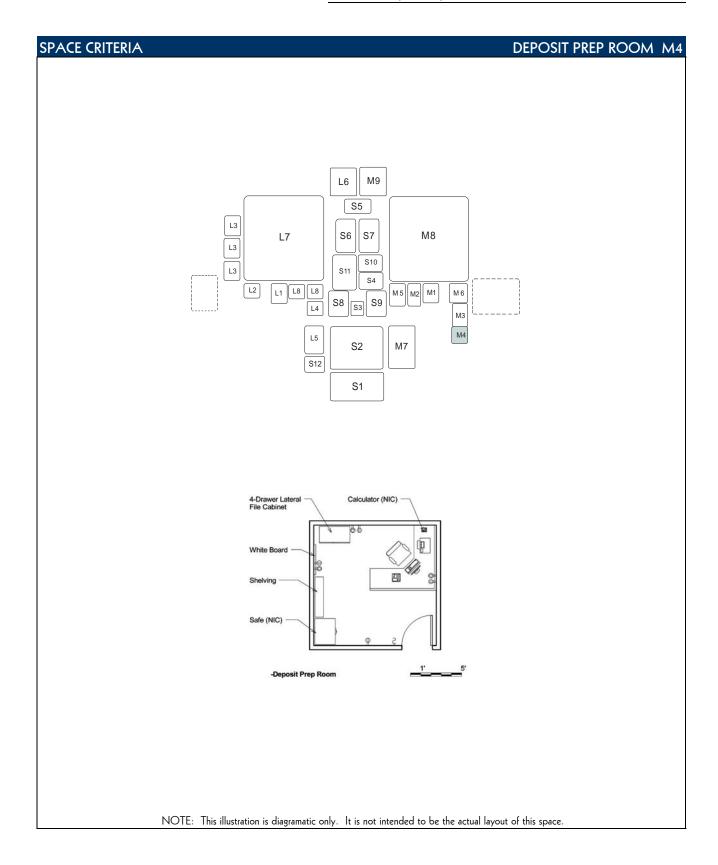
SPACE CRITERIA	DEPOSIT PREP ROOM M4

NO.	$\overline{\mathbf{V}}$	ITEM	$\square$	NOTE
1	X	Space Type - Direct delivery door access preferred		Open Modular furniture 🗵
			X	Fixed - private
2	X	Function	X	Accessed by supervisors all day, and employees at end of day to sign off deposits.
3	X	Hours of Operation: Monday-Saturday	X	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
				Facility Standard - These hours are public access.
4	X	Size		Width: 12
				Length: 12
_	-	C du L d L		Area: 144
5	X	Ceiling height		Height from floor: 10ft
6	X	Ceiling type		Acoustical Lay-In Ceiling
			$\square$	Sheet Rock - Hard ceiling because of money safe, limit easy roof access.
				Open to Structure Other
7	X	Lighting		Direct Fluorescence
,	121	шанана		Indirect Fluorescence
				Day Lighting
				Special Special
8	X	Number of Occupants		Number: 1
9	X	Number of Visitors		Number: 1
10	X	Security		None
		Locked door. Security camera.	X	Other: Door locked all day. Security camera in room.
		Different hours than DLD-secure each facility.		
11	X	Equipment Not In Contract (NIC)		Calculator
				Safe 60-1/2"H x 31"W $+$ 24-1/2"D (accessed to make change with manager)
12		Equipment in Construction Contract		
4.0	-	D 0 1	-	
13	$\square$	Power Outlets	X	Number of Standard duplex outlets: $4_i$ a duplex on each wall.
14		Special Power		Special outlets and voltage:
15	X	Furniture	X	Work Chair - Number: 1 Size:
13	ىك	1 difficult		Side Chair - Number: Size:
			_	Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
			X	File - Types: lateral Number: 1 Size: 2 drawer
		Herman Miller work surfaces		File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
			X	1 Open shelves (4) 4 ft. wide

AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Dep	osit Prep Room		

SPA	CE	CRITERIA		DEPOSIT PREP ROOM M4
NO.	$\overline{\mathbf{A}}$	ITEM		NOTE
16		Floor Finish	X	Carpet
10		1 IOOI 1 IIIISII		Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
				Oute.
17	X	Base Finish	×	Rubber
.,		Date i illisii		Wood
				Tile
				Other:
				Other.
18	X	Millwork (type and length)	X	Shelving or stand alone. Stores boxes of decals.
		rails only on walls with guest chairs, to measure		Type: Length:
		ith chair size.		Type: Length:
	•			Type: Length:
				Type: Length:
19	X	Telephone	X	Number of Outlets: 3
		·	X	Number of Handset: 1 NIC:
				Special:
20	X	Data	X	Number of Outlets: 3 - Voice/Data on 3 walls
				Special power:
21	X	Audio Visual		None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
			X	White Boards - Size: 3x4 Number: 1
				Other:
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
23		Acoustical Control	X	Standard
				Special:
24	X	Other Requirements	Making	g space accessible to outside door preferrable; driver picks up money-goes directly out
			-	
1				

Space Name: Deposit Prep Room



AGENCY:	DMV 🗵	DLD 🗆	SHARED
Space Name: Dea	aler Service Area		

	В.	A .				$\mathbf{r}$	_	71	A
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J		<b>A</b> 1	•	_	•	1	-	N	/ \

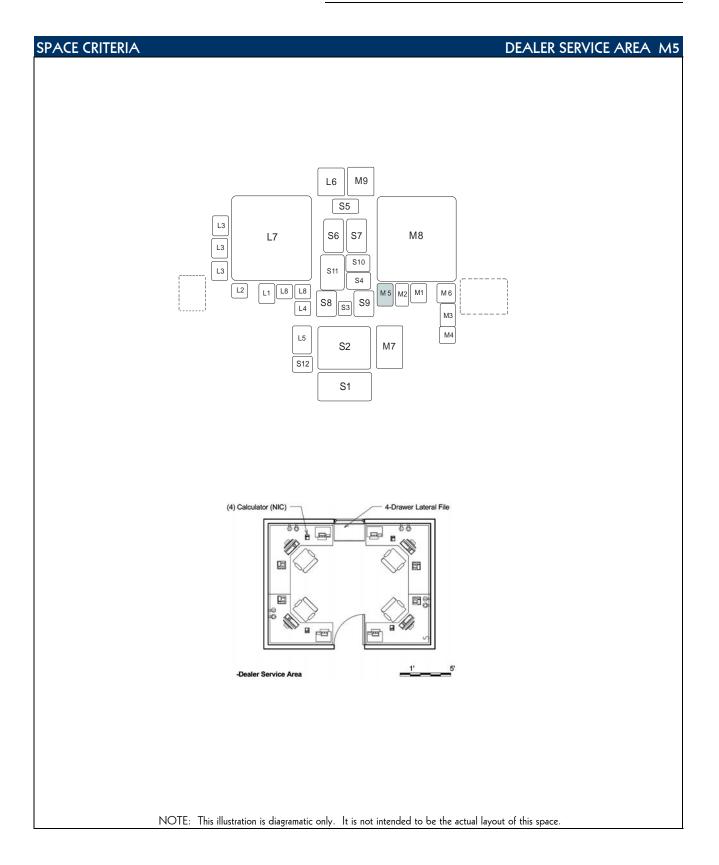
## DEALER SERVICE AREA M5

NO		ITEN 4		NOTE
NO.	V	ITEM	$\square$	NOTE
	_		_	_
1	X	Space Type		Open Modular furniture 🗵
			X	Fixed - private
2	X	Function	X	Directly services dealers. Behind scenes dealer packet processing.
3	X	Hours of Operation: Monday-Saturday	X	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
				Facility Standard - These hours are public access.
4	X	Size		Width: 16
				Length: 16
				Area: 256
5	X	Ceiling height		Height from floor: 10ft
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
			X	Indirect Fluorescence
			X	Day Lighting
				Special
8	X	Number of Occupants		Number: 4
9	X	Number of Visitors		Number: 0
10	X	Security	X	None
		Different hours than DLD-secure each facility.		Other: Office should be able to be locked at night.
11	X	Equipment Not In Contract (NIC)		Computer, Monitor, Calculator
				Printer
12	X	Equipment in Construction Contract		
			_	
13	X	Power Outlets	X	Number of Standard duplex outlets: 8; 2 duplexes on each wall.
14		Special Power		Special outlets and voltage:
1.5	[C7]	Γ	[C7]	VV   C  · N   4
15	X	Furniture	×	Work Chair - Number: 4 Size:
				Side Chair - Number O Size:
				Other Chairs - Type: Number: Size:
		The III Add II Co.		Other Chairs - Type: Number: Size:
		Using Herman Miller modular furniture.		Tables - Type: Number: Size:
			-	Tables - Type: Number: Size:
		2 - 2-drawer lateral drawer files	X	File - Types: Herman Miller-modular. Number: Size:
			X	File - Types: 2 drawer lateral files Number: 2 Size: Lateral
				File - Types: Number: Size:
				Other:
i .			1	T. Control of the con

AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Dea	aler Service Area		

SPA	CE (	CRITERIA		DEALER SERVICE AREA M5
NO.	$\overline{\square}$	ITEM	☑	NOTE
16	X	Floor Finish	X	Carpet
				Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)		None
				Type: Length:
19	X	Telephone	X	Number of Outlets: 3; due to room size gives ability to move or add.
			X	Number of Handset: 1 NIC:
				Special:
				·
20	X	Data	X	Number of Outlets: 3 - Voice/Data on 3 walls
		1 on short wall; 2 on long wall		Special power:
		•		
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards Number:
				Other:
22		Special HVAC Requirements	X	Standard
		.,		Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
			_	- Control
23		Acoustical Control	X	Standard
		/ tesastical control		Special: Sound proof walls.
				Special. Sound proof Walls.
24	X	Other Requirements		Prefer dealer area closer to a drop off area where dealers can drop off their packets;
27		Care requirements		would be best if packets were locked up at nightbehind a door or cupboard.
				mound be best if packets were locked up at hight-bellind a door of cupobald.
				Have open shelving available to place packets awaiting dealers to pick up.
				i lave open shelving available to place packets awaiting dealers to pick up.

Space Name: Dealer Service Area



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Driv	e Thru Service Area Office		

## DRIVE THRU SERVICE AREA OFFICE M6

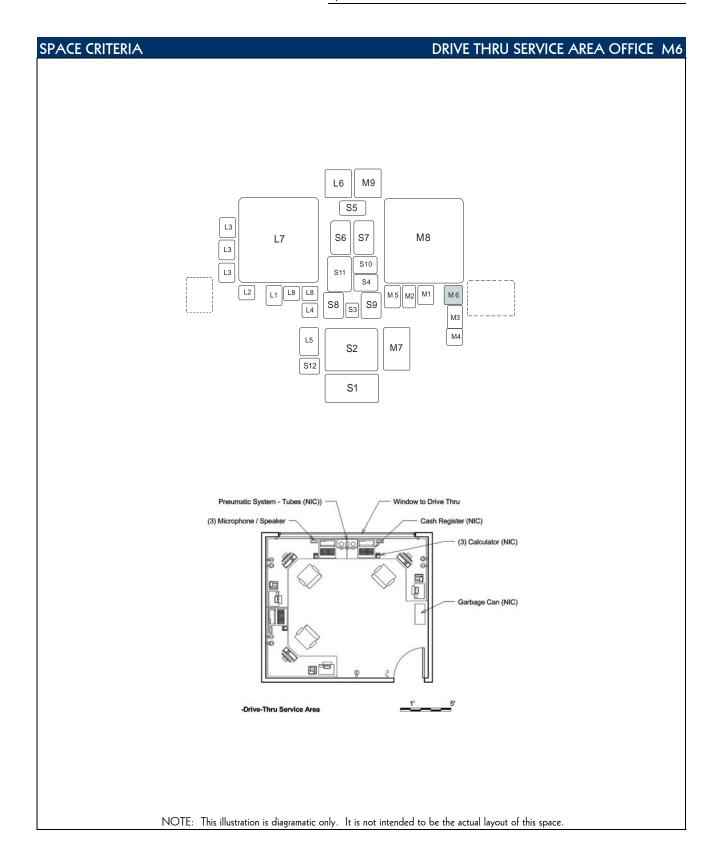
NO.	$\overline{\mathbf{V}}$	ITEM	$\square$	NOTE
1	X	Space Type		Open Modular furniture 🗵
		Area needs to be closed in due to noise.	X	Fixed - Shared
2	X	Function	X	Accessed all day by drive-up customers for renewals only.
3	X	Hours of Operation: Monday-Saturday	X	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
				Facility Standard
4	X	Size		Width: 14
				Length: 14
				Area: 196
5	X	Ceiling height		Height from floor: 10ft
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
			X	Indirect Fluorescence
			X	Day Lighting - Large window to view driveup customers; larger design preferrable. Also,
				a window to view drive-up customer line
8	×	Number of Occupants		Number: 3
9	×	Number of Visitors		Number: 0
10	X	Security		None
		Different hours than DLD-secure each facility.	X	Other: Camera
	_	5		
11	X	Equipment Not In Contract (NIC)		3 Computers + 3 Printers + 3 Monitors + 3 Calculators
				3 Cash registers - keyed into computers for dispensing drawer.
				Garbage cans
10	[FZ]			D
12	X	Equipment in Construction Contract		Pneumatic tubes
				Microphones - speaker system
				"Open/Close" electrical light signs outside above drive-thru.  Roll-up blind - mounted.
12	X	Power Outlets	X	'
13		Special Power		Number of Standard duplex outlets: 6, a duplex on each wall.  Special outlets and voltage:
14		Special Power		Special outlets and voltage:
15	X	Furniture	X	Work Chair - Number: 3 Size: High stool chairs
, ,	<u> </u>			Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
		Built-in work stations?		Other Chairs - Type: Number: Size:
		HM work surfaces.		Tables - Type: Number: Size:
		THAT WORK Surfaces.		Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
			X	Other:
			_	Mounted sun screen to block sun, if necessary.

AGENCY:	DMV 🗵	DLD 🗆	SHARED
Space Name: Driv	e Thru Service Area Office	:	

SPACE CRITERIA				DRIVE THRU SERVICE AREA OFFICE ME
NO.	☑ ITEM	V	NOTE	

NO.	$\overline{\mathbf{V}}$	ITEM	$\square$	NOTE
16	X	Floor Finish	X	Carpet
				Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)		None:
		***		Type: Length:
				7/1
19	X	Telephone	X	Number of Outlets: 4
			X	Number of Handset: 1 NIC:
				Special:
				Special.
20	X	Data	X	Number of Outlets: 4 - Voice/Data on each wall
				Special power:
				Microphone system. Open/Close electrical signs switch.
				Third phone system. Open, close decental signs switch.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards - Size: Number:
				Other:
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
				Currently using fans to cool area but can cause circuit breaker issues.
				,
23		Acoustical Control	X	Standard
				Special:
			$\overline{\mathbb{X}}$	Closed off with a wall and door to avoid noise from counters w/mics.
24	X	Other Requirements		Design driveup lanes possibly facing North or East to avoid direct sunlight/heat?
		•		Stagger cars at window for better view of customers in all cars.
	Close	d off with a wall and door to avoid noise.		Pneumatic tubes placed together for easier access.
		•		ADA:
		•		One station needs to be ADA compliant: max 34" H, 27" knee clearance, 30" W 19"D
		•		overall space must have 30 x 48" width space; window low enough for viewing from
		•		wheelchair, all pneumatic tubes accessible and operablecannot exceed 48" from ground.
				Modular furniture allows for changes; built-in areas would have to comply.

Space Name: Drive Thru Service Area Office



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Stor	age Room		

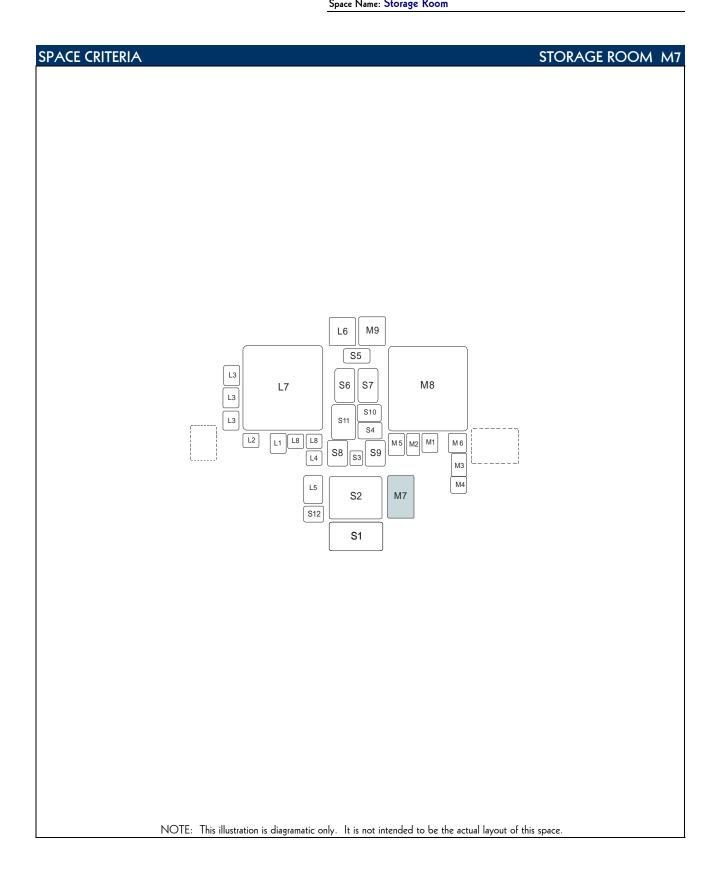
SE ROOM M7

NO.	$\overline{\mathbf{A}}$	ITEM	V	NOTE		
1	X	Space Type		Open Modular furniture 🗵		
	-	F .	×	Fixed - Shared		
2	X	Function	X	Stores office supplies, kitchen supplies, paper boxes, bathroom supplies, decals, and		
3	[V]	Hours of Operation: Monday-Saturday	X	license plates. From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays		
3		Tiours of Operation: Monday-Saturday		Facility Standard		
4	X	Size		Width: 20		
		0120		Length: 35		
				Area: 700		
5	X	Ceiling height		Height from floor: 10 ft		
6	X	Ceiling type		Acoustical Lay-In Ceiling		
			X	Sheet Rock		
				Open to Structure		
				Other		
7	X	Lighting		Direct Fluorescence		
			×	Indirect Fluorescence		
			$\boxtimes$	Day Lighting		
		N 1 (0		Special		
9	<u>-</u>	Number of Occupants Number of Visitors		Number:		
10		Security	X	Locked door.		
10		Different hours than DLD-secure each facility.	X	Other: Camera		
		Different floats than DED-secure each facility.		Other. Camera		
11	X	Equipment Not In Contract (NIC)		Sturdy plastic or metal shelving		
				71		
12		Equipment in Construction Contract				
12	[27]	D 0.1.				
13	$\square$	Power Outlets	X	Apprx. 3 duplex outlets along each wall.		
14		Special Power		Special outlets and voltage:		
15	X	Furniture		Work Chair - Number: Size:		
				Side Chair - Number: Size:		
				Other Chairs - Type: Number: Size:		
		Shredder bins (3) stored here.		Other Chairs - Type: Number: Size:		
				Tables - Type: Number: Size:		
				Tables - Type: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
			□	Other:		
			X	8 to 10 - 5-shelf sturdy metal or plastic shelving		

AGENCY:	DMV 🗵	DLD 🗆	SHARED
Space Name: Sto	rage Room		

SPA	CE (	CRITERIA		STORAGE ROOM M7
10.	$\overline{\mathbf{Q}}$	ITEM		NOTE
16		Floor Finish		Carpet
			X	Vinyl Tile
				Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
1.0		A 6/11   1 / 1   1   1   1   1   1   1   1		NI .
18		Millwork (type and length)	X	None
				Type: Length:
				Type: Length: Type: Length:
				Type: Length:
				Type. Length.
19		Telephone	X	Number of Outlets: 3
, ,		Total		Number of Handset: NIC:
				Special:
20	X	Data	X	Number of Outlets: 3; 1 Voice/Data on 3 walls
				Special power:
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards - Size: Number:
				Other:
		0 110/160		
22		Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days: Other:
				Other:
23	П	Acoustical Control	X	Standard Standard
2.5		/ (coustical Control		Special:
				opecial.
24	X	Other Requirements		Access close to delivery entrance, and possibly employee entrance.
				Receives 100 paper boxes delivered every 4 months.

AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Sana Nama Star	vaga Paam		



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Cust	tomer Service Area		

### CUSTOMER SERVICE AREA M8

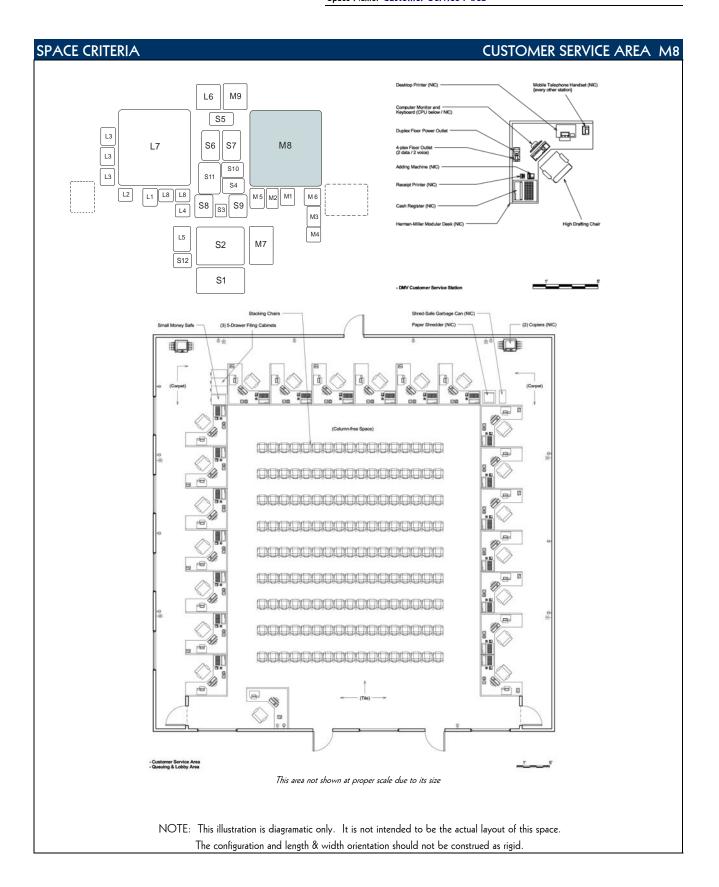
NO		ITEM 4		NOTE		
NO.	$\overline{\mathbf{Q}}$	ITEM		NOTE		
	_		_			
1	X	Space Type		Open Modular furniture 🗵 6'6" x 6'6" cube areas (outside measurement)		
_			X	Fixed - Shared		
2	X	Function	X	Stations to service public.		
_						
3	×	Hours of Operation: Monday-Saturday	×	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays		
	_	<u></u>		Facility Standard - These hours are public access.		
4	[X]	Size		Width: 50		
				Length: 80		
-	[V]	C + 1 · 1 ·		Area: 4,000		
5 6	X	Ceiling height	[27]	Height from floor: 10 ft		
0	X	Ceiling type	×	Acoustical Lay-In Ceiling		
				Sheet Rock		
				Open to Structure Other		
7	X	Lighting		Other Direct Fluorescence		
/		Lighting	⊠	Indirect Fluorescence		
			×	Day Lighting - Several large outside windows preferred for atmosphere + lighting.		
				Special		
8	X	Number of Occupants		Number: 1 employee at each station; 20 active stations		
9	X	Number of Visitors		Number: 1+ at each station; 100+ in waiting area		
10		Security	X	Door alarms, emergency lighting, panic buttons at Q desk and each service station		
10		Need cellular backup to alarm	×	Motion sensors, card key system access to employee areas		
		Different hours than DLD-secure each facility.	×	Cameras (on own server)		
11	X			Herman Miller stations		
		Equipment / lot in Solitate (1415)		Computers + Monitors + Printers + 2 copiers placed against back wall		
				Cameras		
				Adding machine, receipt machine, shredders and garbage cans		
				Cash registers - keyed into computers for dispensing metal drawer.		
12		Equipment in Construction Contract				
13	X	Power Outlets	X	Each station needs multiple power and data outlets; run through Herman Miller furniture.		
14	X	Special Power		Special outlets and voltage:		
		2 copiers and 2 fax machines are placed		Apprx. 6 Duplex outlets along back wall every 20 ft.		
		against back wall				
15	X	Furniture	X	Work Chair - Number: 1(20 total)  Size: High stool chair		
				Side Chair - Number Size:		
	01		X	Other Chairs - Type: Stacking Chairs Number: 150 Size:		
	Shred	der bins (3)place in store room, hopefully		Other Chairs - Type: Number: Size:		
				Tables - Type: Number: Size:		
				Tables - Type: Number: Size:		
			×	File - Types: File drawers (3)? Number: Size:		
			X	File - Types: HM Hanging files Number: Size:		
				File - Types: Number: Size:		
			[C]	Other:		
			X	Herman Miller modular furniture for all stations with hanging files.		
			X	3' 3" High counters		

AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Cus	tomer Service Area		

SPACE CRITERIA CUSTOMER SERVICE AREA	M
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NIC		ITCA 4		NOTE
NO.	<u> </u>	ITEM	<u> </u>	NOTE
16	X	Floor Finish	X	Carpet - Behind the customer service stations and to back wall (& into offices.)
				Vinyl Tile
			<b>X</b>	Ceramic Tile - Main lobby area with customers.
				Sealed Concrete
				Other:
17	X	Base Finish		Rubber
				Wood
			X	Tile
				Other:
18		Millwork (type and length)		None
				Type: Length:
19	X	Telephone	X	Number of Outlets: Mobile handset at every other station. Outlet in each HM station.
		1 Customer Service courtesy phone on wall	X	Number of Handset: 10 NIC: □
				Special: Mobile
				* include outlets for 2 fax machines
20	X	Data	X	Number of Outlets: 2 data outlets on each wall
				Special power:
				Conduit running through Herman Miller - 1 outlet per workstation
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards - Size: Number:
			X	Other: Q-Matic system will be installed, includes electronic signs over counters
				and speakers in ceiling.
				, , , , , , , , , , , , , , , , , , ,
22		Special HVAC Requirements	X	StandardBUT HEAVY DUTY.
	_			Special Temperature Range: The number of employees/customers create cooling problems.
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
				The number of employees and customers creates cooling problems in the summer.
23		Acoustical Control	X	Standard
				Special:
				labarer.
24	X	Other Requirements		*COLUMN-FREE SPACE*
27	انت	- a.a. Acquirements		Each station needs ample space to store Utah plates.
				Area for supplies + small money safe=ideal access to back door: prepare deposits
			-	courier picksup from safe.
				10 ft. clearance behind waiting chairs and windows - open common area to pace
				Shredder bins (3) access near storage room or near exit for easy access.
L				

Space Name: Customer Service Area



AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Que	uing & Lobby Area (inc	cludes Q desk)	

SPACE CRITERIA	$\wedge$
ISPACE CRITERIA	Q

## QUEUING & LOBBY AREA M9

NO.	$\overline{\mathbf{V}}$	ITEM	Ø	NOTE			
1	X	Space Type		Open Modular furniture 🗵 at Q-desk: This area needs to be part of the DMV			
		This space would be a public pass-through area		side or at the DMV entry, not affecting DLD entry			
		combined for DLD/DMV - the Q-desk needs	X	Fixed - Shared			
		to be inside the DMV portion.					
2	X	Function	X	Queuing entry to dispense service ticket and waiting area for customers.			
3	X	Hours of Operation: Monday-Saturday	$\boxtimes$	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays			
				Facility Standard			
4	X	Size		Width: 20			
				Length: 20			
	-	C du L d L		Area: 400			
5	×	Ceiling height	-	Height from floor: 10 ft			
6	X	Ceiling type	×	Acoustical Lay-In Ceiling			
				Sheet Rock			
				Open to Structure			
7	[EZ]	1.1		Other Dr			
7	LŽI	Lighting		Direct Fluorescence			
			X	Indirect Fluorescence			
			X	Day Lighting - Several large outside windows preferred for atmosphere + lighting, or			
	[V]	N I CO		glass wall like in South Jordan complex.  Number: 150			
9	X	Number of Occupants  Number of Visitors		Number: 1000 - 1500 customers pass through per day			
10	X		X				
10	ഥ	Security  Need cellular backup to alarm.	X	Door alarms, emergency lighting, panic button at Q desk.  Motion sensors, card key system access to employee areas.			
		Different hours than DLD-secure each facility.	X	Cameras (on own server)			
11	X	,		Herman Miller station for Q desk.			
11		Equipment (Not in Contract (NIC)		Computer at Q desk linked to Q-Matic System			
				Lobby garbage cans			
12	X	Equipment in Construction Contract		Rail for Queuing area			
12		Equipment in Construction Contract		Nail 101 Queuling alea			
13	X	Power Outlets	X	Apprx. 6 Duplex outlets along back wall every 20 ft.			
14	×	Special Power		Special outlets and voltage:			
		ореан голга		opecial outlets and voltage.			
15	X	Furniture		Work Chair Number: Size:			
				Side Chair Number: Size:			
				Other Chairs - Type: Number: Size:			
				Other Chairs - Type: Number: Size:			
				Tables - Type: Number: Size:			
				Tables - Type: Number: Size:			
				File - Types: Number: Size:			
				File - Types: Number: Size:			
				File - Types: Number: Size:			
				Other:			

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AGENCY:	DMV 🗵	DLD 🗆	SHARED □
Space Name: Que	euing & Lobby Area (in	cludes Q desk)	

SPACE CRITERIA		QUEUING & LOBBY AREA M9
no. 🗹 Item		NOTE
16 🗵 Floor Finish		Carpet
		Vinyl Tile
	X	Ceramic Tile
		Sealed Concrete
		Other:
17 🗵 Base Finish		Rubber
		Wood
	X	Tile
		Other:
18   Millwork (type and length)	X	None
		Type: Length:
10. 5. 7. 1		N. I. (0.1
19		Number of Outlets:
		Number of Handset: NIC:
customer service area		Special:
20 🗵 Data	X	Number of Outlets: 1 for Q desk
		Special power:
		Conduit running through Herman Miller.
21 🗆 Audio Visual	X	None
		Built In Video Projector
		Projector Screen Power: □ Manual: □
		White Boards - Size: Number:
		Other:
22 Special HVAC Requirements	X	StandardBUT HEAVY DUTY.
		Special Temperature Range: The number of employees/customers create cooling problems.
		Special Humidity Range:
		Special Operating Times: Hours: Days:
		Other:
		The number of employees and customers creates cooling problems in the summer.
23   Acoustical Control	$\boxtimes$	Standard Standard
23 🖂 Acoustical Control		Special:
		эресы:
24  Other Requirements		

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Space Name: Queuing & Lobby Area (includes Q desk)

SPACE CRITERIA	QUEUING & LOBBY AREA	M9
L6 M9  S5  S6 S7  M8  S1 S8 S3 S9  M7  M3  L5 S2  M7		
NOTE: This illustration is diagramatic only. It is not intended to be the actual	layout of this space.	

AGENCY:	AGENCY: DMV □		SHARED 🗵
Space Name:	Staff Break Room - SHARED		•

SPACE CRITERIA	STAFF BREAK ROOM S1

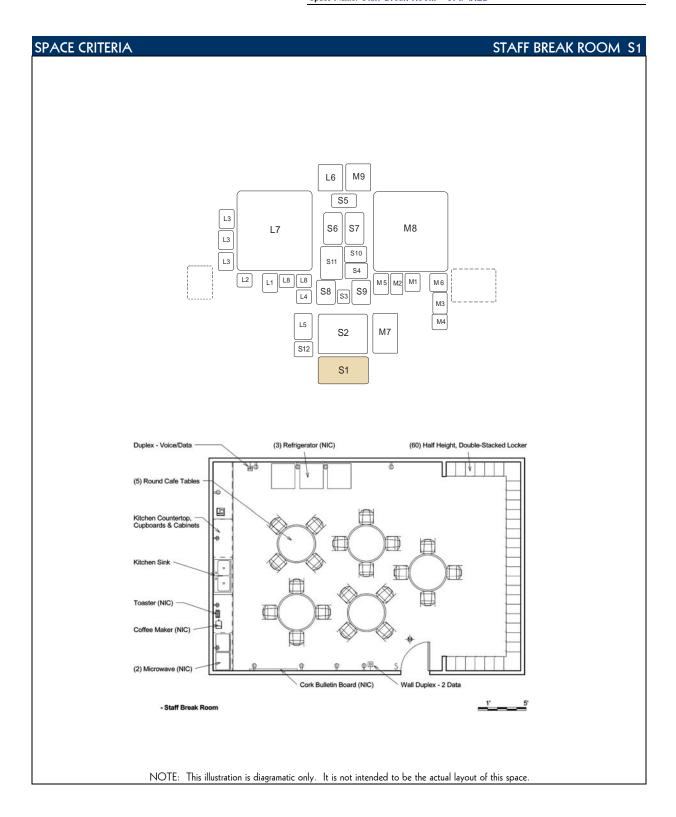
			1 _	l			
NO.	$\overline{\mathbf{Q}}$	ITEM	V	NOTE			
1	X	Space Type	X	Open Modular furniture 🗆			
				Fixed - private			
2	X	Function	X	Staff breaks and lunch room; lockers for personal items, extra uniforms.			
3	X	Hours of Operation		From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays			
		PUBLIC HOURS OF OPERATION:		From: 7:00 a.m. To: 6:00 p.m. Days: M - F			
				Facility Standard			
4	×	Size		Width: 22			
				Length: 32			
		C the Levil		Area: 704			
5	×	Ceiling height		Height from floor: 10 ft			
6	×	Ceiling type	×	Acoustical Lay-In Ceiling			
				Sheet Rock			
				Open to Structure			
<u> </u>		Ta La		Other D			
7	×	Lighting		Direct Fluorescence			
			×	Indirect Fluorescence			
			×	Day Lighting Outside windows requested.			
		N		Special			
8		Number of Occupants		Number: 50 intermittently			
9		Number of Visitors		Number:			
10		Security (C. 1)	X	Access from common areas to separate DLD and DMV areas will require card-key			
	DLD	& DMV have different hours - secure each facility.		access doors			
			X	Other: Motion detectors.			
4.4	- F27	F :		D ( · · · (2)			
11	[X]	Equipment Not In Contract (NIC)		Refrigerators (3) large			
				Microwaves (4)  Coffee maker (2?)			
				Toaster and Toaster oven (2)  Cork bulletin board 3 x 5 (2)			
1.0	X	Equipment in Construction Contract		Cork bulletin board 3 x 5 (2)  Cabinets, countertop, sink with disposal			
12		Equipment in Construction Contract					
				Lighting above sink  Water line for ice in fridges / hot & cold dispenser			
				Build-in lockers			
				Duild-in lockers			
13	X	Power Outlets - Will be spec'd for space.	X	4-duplex outlets low on each wall (8 total); 3-quads above countertop (12 outlets)			
14	×	Special Power	<u> </u>	Special outlets and voltage: Microwaves and Disposal			
1 **		Opecial I Owel		Special outlets and voltage. Ivilciowaves and Disposal			
15	X	Furniture		Work Chair - Number: Size:			
, ,	ىنى	Turriture	×	Side Chair - Number: 30 Size: stacking			
				Other Chairs - Type: Number: Size:			
		60 Half-length lockers inset into wall		Other Chairs - Type: Number: Size:			
		O i mir-rengui rockers maet mito wan	X	Tables - Type: Number: 5 Size: 5 ft rounds			
				Tables - Type: Number: Size:			
				File - Types: Number: Size:			
				File - Types: Number: Size:			
				File - Types: Number: Size:			
				Other:			
			X				
			X	Bulletin board - cork			
			-				

AGENCY: DMV □		DLD 🗆	SHARED 🗵
Space Name: St	aff Break Room - SHARED		

SPA	CE (	CRITERIA		STAFF BREAK ROOM S1
.10		ITEL		Note
NO.	✓ ×	Floor Finish		NOTE
16		Floor Finish		Carpet Vinyl Tile
			$\boxtimes$	Ceramic Tile
				Sealed Concrete
				Other:
				Other.
17	X	Base Finish	X	Rubber
.,	_	2400 - 1111311		Wood
				Tile
				Other:
18	X	Millwork (type and length)		None
		Chair rails on all walls but not behind counters	X	Type: Upper cabinets Length: Length of wall
		and lockers - to measure up with chair height	X	Type: Countertops w/sink Length: Length of wall
			X	Type: Lower cabinets Length: Length of wall
			X	Type: Shelves Length: Length of wall
19	X	Telephone	X	Number of Outlets: 1
			X	Number of Handset: 1 NIC: 🗆
				Special:
20	X	Data	X	Number of Outlets: 3; one data jack on each wall (except countertop wall)
				Special power:
				l.
21		Audio Visual		None
				Built In Video Projector  Projector Screen Power:   Manual:
				Projector Screen         Power: □         Manual: □           White Boards - Size:         Number:
			×	Other: TV??. Co-axial jack for televisionNot in Contract
				Other: 1 V !!. Co-axiai jack for television1 Not in Contract
22	[X]	Special HVAC Requirements	X	Standard
22		Special 1147 to Requirements		Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
			X	Other: Venting for Kitchens
23	X	Acoustical Control		Standard
			X	Special: Sound proof walls: Assign S.T.C. Rating 50-55
24		Other Requirements		

AGENCY: DMV □ DLD □ SHARED 🗵

Space Name: Staff Break Room - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Con	ference / Training Room	- SHARED	

# CONFERENCE / TRAINING ROOM \$2

NO.	$\overline{\checkmark}$	ITEM	$\square$	NOTE		
1	X	Space Type	X	Open Modular furniture 🗆		
				Fixed - private		
2	X	Function	$\overline{\mathbf{x}}$	Training room and conferences.		
	17.1	Tunction	<u> </u>	Training foom and conferences.		
3	☑	Hours of Operation	DMAN	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays		
3	ഥ	PUBLIC HOURS OF OPERATION:				
		PUBLIC HOURS OF OPERATION:		From: 7:00 a.m. To: 6:00 p.m. Days: M - F		
	-	Ć:		Facility Standard		
4	X	Size		Width: 30		
				Length: 40		
				Area: 1,200		
5	X	Ceiling height		Height from floor: 10 ft		
6	X	Ceiling type	$\boxtimes$	Acoustical Lay-In Ceiling		
				Sheet Rock		
				Open to Structure		
				Other		
7	X	Lighting		Direct Fluorescence		
			X	Indirect Fluorescence		
			X	Day Lighting Outside windows requested.		
				Special		
8	X	Number of Occupants		Number: 50 - 60		
9		Number of Visitors		Number:		
10		Security		None.		
10		· · · · · · · · · · · · · · · · · · ·				
	DLD	& DMV have different hours-secure each facility.	X	Other: Motion detectors.		
4.4	-	F . N. I. C. (AUC)		D (		
11	X	Equipment Not In Contract (NIC)		Podium		
		Need to verify all equipment.		Television + stand		
				VCR / DVD		
12	X	Equipment in Construction Contract		High Efficiency Soundproof Divider Panel with White Board on each side.		
		Need to verify all required equipment.		Overhead speakers		
				Audio / Visual station (built-in?)		
13	X	Power Outlets	×	8-duplex outlets spaced on each wall (16 outlets total)		
14	X	Special Power		Special outlets and voltage:		
		•				
15	X	Furniture		Work Chair - Number: Size:		
13		Turritare	×	Side Chair - Number: 60 Size: stacking		
			<u> </u>	Other Chairs - Type: Number: Size:		
			☑	Other Chairs - Type: Number: Size:		
			×	Tables - Type: Number: 16 Size: 5 ft.		
				Tables - Type: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				Other:		
			X	White boards - 1 front and 1 back = 2 total ; 4 ft $H \times 12$ ft. L		

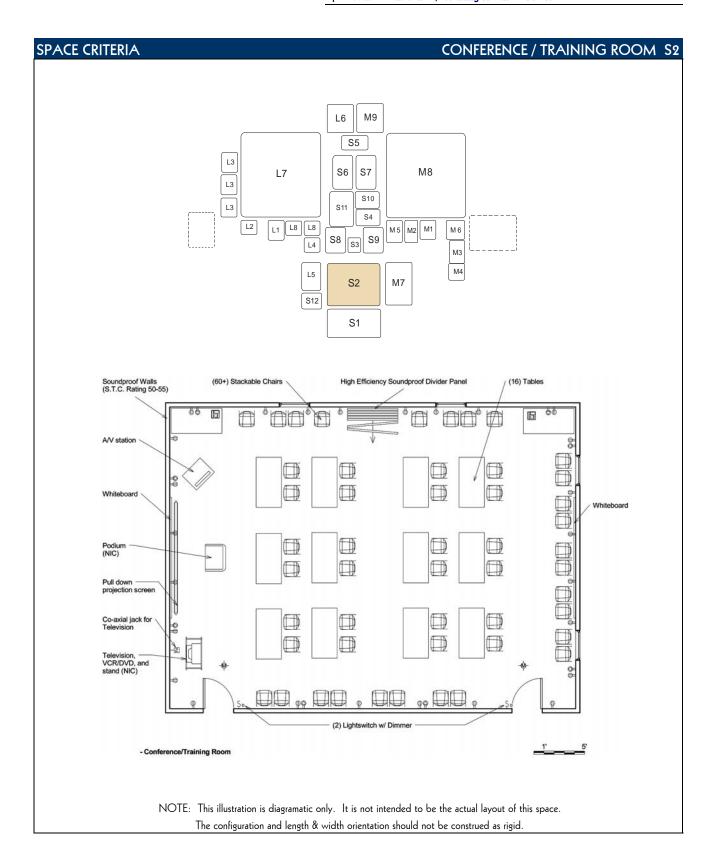
AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Con	ference / Training Room	- SHARED	

SPACE CRITERIA	CONFERENCE / TRAINING ROOM S

NIO	1.71	ITEM	$\overline{\mathbf{V}}$	NOTE
NO.	×	Floor Finish	X	Carpet
16		FIGOR FINISN		Vinyl Tile
				Vinyi Tile  Ceramic Tile
				Sealed Concrete
				Other:
			ш	Other:
17	X	Base Finish	X	Rubber
17		Dase I mish		Wood
				Tile
				Other:
				Other.
18	X	Millwork (type and length)		None
10		Chair rails on all walls.		Type: Length:
		Chair fails on all Walls.		Type: Length:
				Type: Length:
				Type: Length:
				Type. Lengui.
19	X	Telephone	X	Number of Outlets: 2 (1 each side)
.,,	_	Тогориянс	×	Number of Handset: 2 (1 each side)  NIC:
				Special:
				openia.
20	X	Data	X	Number of Outlets: Voice / Data jacks (2) each wall = 16 total
				Special power:
21	X	Audio Visual		None
				Video Projector?
		Lighting zoned/dimmable for presentations	X	Projector Screen Power: 🗵 Manual: 🗆
			X	White Boards - Size: 4ft. X 12 ft. Number: 2
			X	Other: TV??, co-axial jack for television
			X	Speakers in ceiling
22	X	Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
23	X	Acoustical Control		Standard
			X	Special: High Efficiency Soundproof Divider Panel
			X	Special: Sound proof walls - Assign S.T.C. Rating 50-55
24	X	Other Requirements		Two doors - one at each corner of room.

AGENCY: DMV □ DLD □ SHARED 🗵

Space Name: Conference / Training Room - SHARED



AGENCY:	DMV 🗆	DLD 🗖	SHARED 🗵
Space Name: Jani	torial Closet - SHARED		

JANITORIAL CLOSET S

NO		ITEA 4		NOTE	
NO.	M	ITEM	V	NOTE	
	_		_		
1	X	Space Type	×	Open Modular furniture	
				Fixed - private	
2	X	Function	X	Stores mops, mop bucket, brooms, vacuums, cleaning supplies.	
3	X	Hours of Operation		All hours	
			DLD	All hours	
				Facility Standard	
4	X	Size		Width: 10	
				Length: 10	
				Area: 100	
5	X	Ceiling height		Height from floor: open to structure	
6	X	Ceiling type		Acoustical Lay-In Ceiling	
				Sheet Rock	
			X	Open to Structure	
				Other	
7	X	Lighting	X	Direct Fluorescence	
				Indirect Fluorescence	
				Day Lighting	
				Special	
8		Number of Occupants		Number: N/A	
9		Number of Visitors		Number: N/A	
10		Security	X	None	
	DLD	& DMV have different hours-secure each facility.		Other:	
11	X	Equipment Not In Contract (NIC)		Mops	
				Brooms	
				Vacuums	
				Buckets	
12	X	Equipment in Construction Contract		Mop sink and Drain	
				Shelving	
				Hose bib?	
				Water - hot/cold outlets	
				Wall rack to hold mops / brooms	
13	X	Power Outlets	X	1-duplex outlet (Grounded) - GSI	
14		Special Power		Special outlets and voltage:	
15		Furniture		Work Chair - Number: Size:	
				Side Chair - Number: Size:	
				Other Chairs - Type: Number: Size:	
				Other Chairs - Type: Number: Size:	
				Tables - Type: Number: Size:	
				Tables - Type: Number: Size:	
				File - Types: Number: Size:	
				File - Types: Number: Size:	
				File - Types: Number: Size:	
				Other:	

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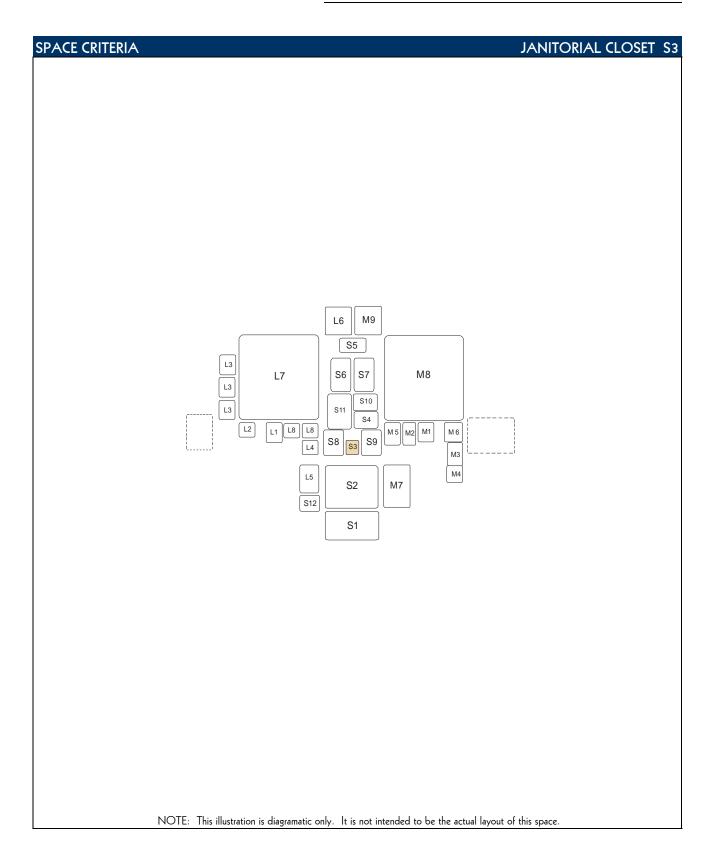
AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Jani	torial Closet - SHARED		

SPA	CE (	Criteria		JANITORIAL CLOSET S3
NO.		ITEM		NOTE
16		Floor Finish		Carpet
				Vinyl Tile
				Ceramic Tile
			X	Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18	X	Millwork (type and length)		None
			X	Type: Adjustable shelving Length: 2 -1/2'D x 4'W x 6'H
			X	Type: Wall rack for mops/brooms Length:
				Type: Length:
				Type: Length:
		T		N. I. (0.1
19		Telephone		Number of Outlets:
				Number of Handset: NIC:
				Special:
20		Data		Number of Outlets:
				Special power:
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
				White Boards Number:
				Other:
22	X	Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: Hours: Days:
				Other:
		A		
23		Acoustical Control		Standard
				Special:
24		Other Requirements		

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AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵

Space Name: Janitorial Closet - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Tele	phone / I.T. Room - SH	ARED (with seco	urity clearance)

## SPACE CRITERIA

## TELEPHONE / I.T. ROOM S4

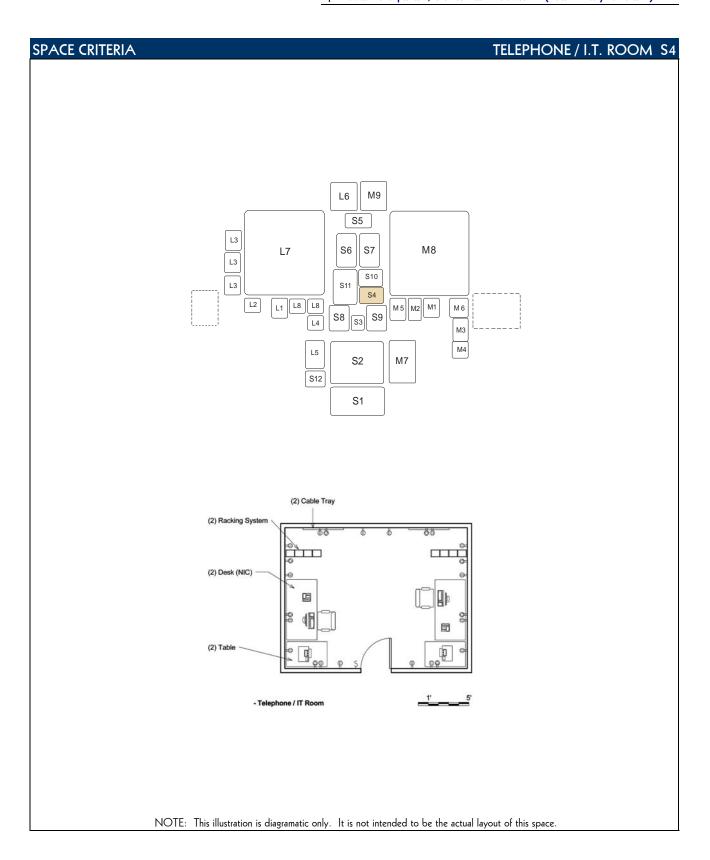
NO.	$\overline{\mathbf{V}}$	ITEM	V	NOTE
1	X	Space Type	X	Open Modular furniture
				Fixed - private
2	X	Function	X	Communications: phones, data processing, servers.
3	X	Hours of Operation	DMV	All hours
			DLD	All hours
				Facility Standard
4	X	Size		Width: 14
				Length: 18
				Area: 252
5	X	Ceiling height		Height from floor: 10 ft.
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
				Other
7	X	Lighting	X	Direct Fluorescence
				Indirect Fluorescence
				Day Lighting
				Special
8	×	Number of Occupants		Number: 1-2
9		Number of Visitors		Number: N/A
10		Security		None
		rity clearance for employee access to this room?	X	Other: No need for motion detectors and/or cameras in this room.
4.4		& DMV have different hours-secure each facility.		
11	X	Equipment Not In Contract (NIC)		Computers - Q-Matic Sysytem.
				Monitors
				Printers
				Desks
12	X	Equipment in Construction Contract		Racking system
12		Equipment in Construction Contract		Cabling trays
				Plywood on walls to adhere cabling trays
				Frywood on wans to adhere caoning trays
13	X	Power Outlets	X	Standards? 4 on all walls = 16 total. (Need set high and low on walls.)
14	×	Special Power		Special outlets and voltage: Standard for room.
		Power strips		Special duties and votage. Standard for foom.
15	X	Furniture	X	Work Chair - Number: 2 Size: Stacking
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
		Desks or tables?	X	Tables - Type: Number: 2 Size: 4 ft.
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
				Desks?

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Tele	phone / I.T. Room - St	HARED (with sec	urity clearance)

SPA	CE (	CRITERIA		TELEPHONE / I.T. ROOM S4
			1	
NO.	$\overline{Q}$	ITEM		NOTE
16	X	Floor Finish		Carpet
				Vinyl Tile
				Ceramic Tile
			X	Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19	X	Telephone	$\boxtimes$	Number of Outlets: 2
			$\boxtimes$	Number of Handset: 2 NIC: □
				Special:
20	X	Data	X	Number of Outlets: (4) each wall = 16 total
				Special power: Standard for room.
		(2) 4" conduit run from street for each agency.		
21		Audio Visual		None
				Built In Video Projector
				Projector Screen Power: □ Manual: □
				White Boards Number:
				Other:
22	X	Special HVAC Requirements		Standard
			X	Special Temperature Range: Air conditioned for operation.
			X	Special Humidity Range:
			X	Special Operating Times: 24/7
				Other:
23		Acoustical Control		Standard
				Special:
				opecial.
24		Other Requirements	1	
	_			Steve and Dave McKay need to discuss the details of this room.
			-	
			-	
			-	

AGENCY: DMV □ DLD □ SHARED 🗵

Space Name: Telephone / I.T. Room - SHARED (with security clearance)



AGENCY:	DMV □	DLD 🗆	SHARED 🗵	
Space Name: Pub	lic Vending Area - S	HARED		

## SPACE CRITERIA PUBLIC VENDING AREA S5

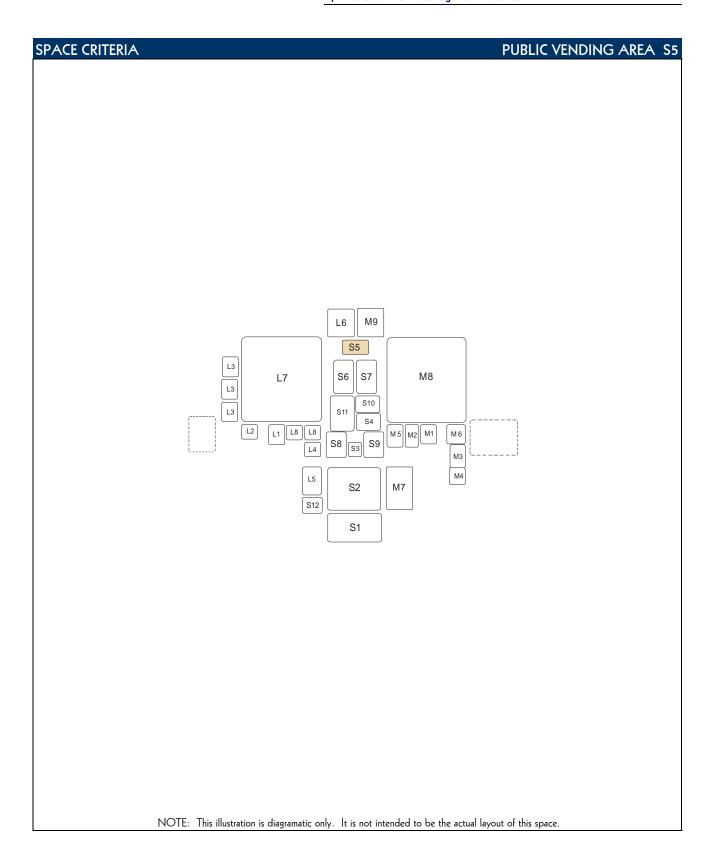
NO.	V	ITEM	$\square$	NOTE
				_
1	X	Space Type	$\boxtimes$	Open Modular furniture
	[FZ]	T		Fixed - private
2	X	Function	X	Vending machines available to customers / staff.
3	X	Hours of Operation	DMV	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
		PUBLIC HOURS OF OPERATION:		From: 7:00 a.m. To: 6:00 p.m. Days: M - F
				Facility Standard
4	X	Size		Width: 10
				Length: 20
				Area: 200
5	X	Ceiling height		Height from floor: 10 ft
6	X	Ceiling type	X	Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure
				Other
7	X	Lighting		Direct Fluorescence
			$\boxtimes$	Indirect Fluorescence
				Day Lighting
8		Number of Occupants		Special Number: Multiple
9		Number of Visitors		Number: Multiple
10		Security		None
, ,		& DMV have different hours-secure each facility.	×	Other: Able to lock-off access to DLD spaces when DLD is closed.
11	X	Equipment Not In Contract (NIC)	X	Soda & Candy vending machines.
		Need to verify all equipment.		
12	X	Equipment in Construction Contract	X	(4) Water drinking fountains; 2 for public and 2 inside staff hallway
		Need to verify all required equipment.	X	Public telephone(s).
13	X	Power Outlets		Standards for room/machines.
14	×	Special Power		Public telephones.
		<u> </u>		
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Publ	ic Vending Area - S	HARED	

SPA	CE	CRITERIA		PUBLIC VENDING AREA S
NO.	$\overline{\mathbf{V}}$	ITEM		NOTE
16		Floor Finish		Carpet
		1100.11110.1		Vinyl Tile
			X	Ceramic Tile
				Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
			_	
18		Millwork (type and length)	X	None
				Type: Length:
19	Ŋ	Telephone - Public telephone(s).	X	Number of Outlets: Public telephone(s).
17	<u> </u>	releptione - ruolic teleptione(s).		Number of Handset: NIC:   NIC:
				Special:
				орестат.
20		Data		Number of Outlets:
				Special power: Standard for room.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
				White Boards Number:
				Other:
22	X	Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times:
				Other:
23		Acoustical Control - N/A		Standard Standard
23		/ (Coustical Colition - 14// (		Special:
				эресіаі.
24		Other Requirements	1	
		•		
1				

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵

Space Name: Public Vending Area - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Pu	ıblic Restrooms - Men (10	) - SHARED	

## SPACE CRITERIA

## PUBLIC RESTROOMS - MEN (10) S6

NO.	$\overline{\mathbf{V}}$	ITEM	V	NOTE
1	X	Space Type		Open Modular furniture 🗆
			X	Fixed - private
2	X	Function	X	Restrooms for public access - men.
3	X	Hours of Operation		From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
		PUBLIC HOURS OF OPERATION:	DLD	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
			X	Facility Standard
4	X	Size		Width: 10
				Length: 36
				Area: 360
5	×	Ceiling height		Height from floor: 9 feet
6	X	Ceiling type		Acoustical Lay-In Ceiling
			$\boxtimes$	Sheet Rock
				Open to Structure
	[V]	1.1.		Other
7	X	Lighting  Emergency outage lighting.		Direct Fluorescence Indirect Fluorescence
		Emergency outage lighting.  Flashing emergency fire lights.		
		riasning emergency fire lights.	⊠	Day Lighting
8		Number of Occupants	ഥ	Special: Lighting over mirrors/sinks Number: 10; including handicap stall
9		Number of Occupants  Number of Visitors		Number: N/A
10		Security	X	None
10		& DMV have different hours-secure each facility.		Other:
	222	or zivi, vi nave amerem nears secare each raemy.		
11	X	Equipment Not In Contract (NIC)		Garbage cans - free standing also.
12	X	Equipment in Construction Contract	X	Stalls (including 1 handicap stall)
			X	Toilets & Urinals (NOT LoFlow)
			X	Countertops + Sinks + Mirrors
			X	Soap & Towel dispensers + Deodorant air fresheners-wall mount
			X	Baby changing table - wall mount
13	<u> </u>	Power Outlets		Number of Standard duplex outlets:
14		Special Power		Special outlets and voltage
1 -		Γ		VV   C  · N     C
15		Furniture		Work Chair - Number: Size: Side Chair - Number: Size:
				Other Chairs - Type: Number: Size: Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:

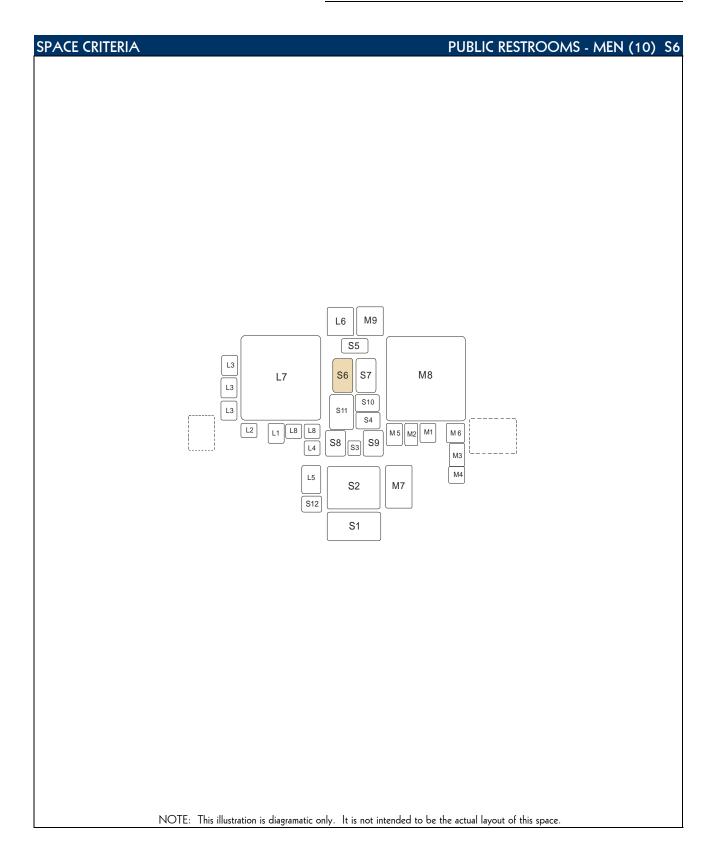
/	AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
5	Space Name: Pub	olic Restrooms - Men (10	) - SHARED	

SPACE CRITERIA	PUBLIC RESTROOMS - MEN (10) Se

NO.	$\overline{\mathbf{V}}$	ITEM	Ø	NOTE
16	X	Floor Finish		Carpet
				Vinyl Tile
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR
				Sealed Concrete
				Other:
17		Base Finish		Rubber
				Wood
			X	Tile
				Other:
18		Millwork (type and length)	X	None
		(-)/		Type: Length:
				Type. Length.
19		Telephone		Number of Outlets:
17		Тегерпопе		Number of Handset: NIC:
				Special:
				opecial.
20		Data		Number of Outlets: None.
20		Data	ш	Nulliber of Outlets. Profile.
21		Audio Visual	X	None
21	ш	Audio Visual		Built In Video Projector
				Projector Screen Power: Manual: Manual
				Other:
	-	C . LLD /A C D .		
22	X	Special HVAC Requirements	×	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times:
				Other: Venting - Negative to other rooms.
0.0		A	-	
23	Ц	Acoustical Control - N/A		Standard
				Special:
24	X	Other Requirements		Lights on motion sensors - 15 minutes.
				Motion sensor flush controls (but not lo-flow toilets).
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR

AGENCY: DMV DLD SHARED X

Space Name: Public Restrooms - Men (10) - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: P	ublic Restrooms - Women (	12) - SHARED	

## SPACE CRITERIA

## PUBLIC RESTROOMS - WOMEN (12) S7

NO.	V	ITEM	$\overline{\mathbf{Q}}$	NOTE
1	X	Space Type		Open Modular furniture 🗆
			X	Fixed - private
2	X	Function	X	Restrooms for public access - women.
3	X	Hours of Operation	DMV	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
		PUBLIC HOURS OF OPERATION:	DLD	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
			X	Facility Standard
4	X	Size		Width: 10
				Length: 36
				Area: 360
5	X	Ceiling height		Height from floor: 9 feet
6	X	Ceiling type		Acoustical Lay-In Ceiling
			X	Sheet Rock
				Open to Structure
				Other
7	X	Lighting	X	Direct Fluorescence
		Emergency outage lighting.		Indirect Fluorescence
		Flashing emergency fire lights.		Day Lighting
			X	Special: Lighting over mirrors/sinks
8		Number of Occupants		Number: 10; including handicap stall
9		Number of Visitors		Number: N/A
10		Security	X	None
	DLD	& DMV have different hours-secure each facility.		Other:
11	X	Equipment Not In Contract (NIC)		Garbage cans - free standing also.
12	X	Equipment in Construction Contract	X	Stalls (including 1 handicap stall)
			X	Toilets (NOT LoFlow)
			X	Countertops + Sinks + Mirrors
			X	Soap & Towel dispensers $+$ Deodorant air fresheners-wall mount $+$ Personal hygiene dispenser
			X	Baby changing table - wall mount
13		Power Outlets		Number of Standard duplex outlets:
14		Special Power		Special outlets and voltage
		_		
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
			1	

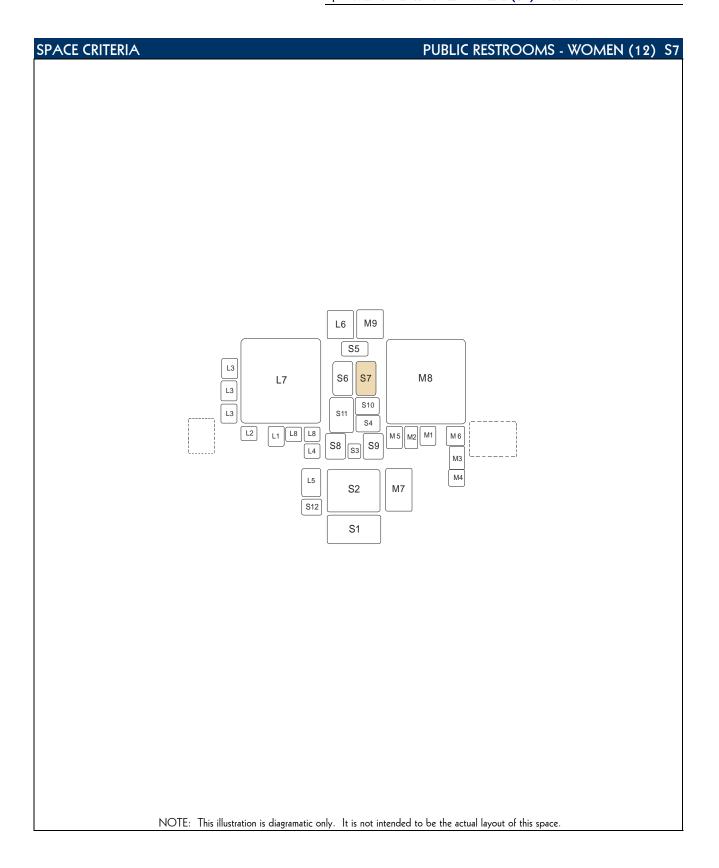
AGENCY:	DMV 🗖	DLD 🗆	SHARED 🗵
Space Name: F	Public Restrooms - Women (1	2) - SHARED	

SPACE CRITERIA		PUBLIC RESTROOMS - WOMEN (12) S7
NO. 🗹 ITEM	$\square$	NOTE
16 🗵 Floor Finish		Carpet
TO THE THIS		Vinyl Tile
	×	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR
		Sealed Concrete
		Other:
17 🗆 Base Finish		Rubber
		Wood
	X	Tile
		Other:
18  Millwork (type and length)	X	None
18 🗀 Williwork (type and length)		Type: Length:
		7/75
19 🗆 Telephone		Number of Outlets:
		Number of Handset: NIC:
		Special:
20 🗆 Data		Number of Outlets: None.
20 El Data		Trainible of Oddiets. Troile.
21 🗆 Audio Visual	X	None
		Built In Video Projector
		Projector Screen Power:   Manual:
		White Boards Number:
		Other:
22 Special HVAC Requirements	X	Standard
		Special Temperature Range:
		Special Humidity Range:
		Special Operating Times:
		Other: Venting - Negative to other rooms.
23 Acoustical Control - N/A	X	Standard
		Special:
24 🗵 Other Requirements		Lights on motion sensors - 15 minutes.
		Motion sensor flush controls (but not lo-flow toilets).

☐ Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR

AGENCY: DMV □ DLD □ SHARED ☑

Space Name: Public Restrooms - Women (12) - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Stat	f Restrooms - Men (6) -	SHARED	

## SPACE CRITERIA

## STAFF RESTROOMS - MEN (6) S8

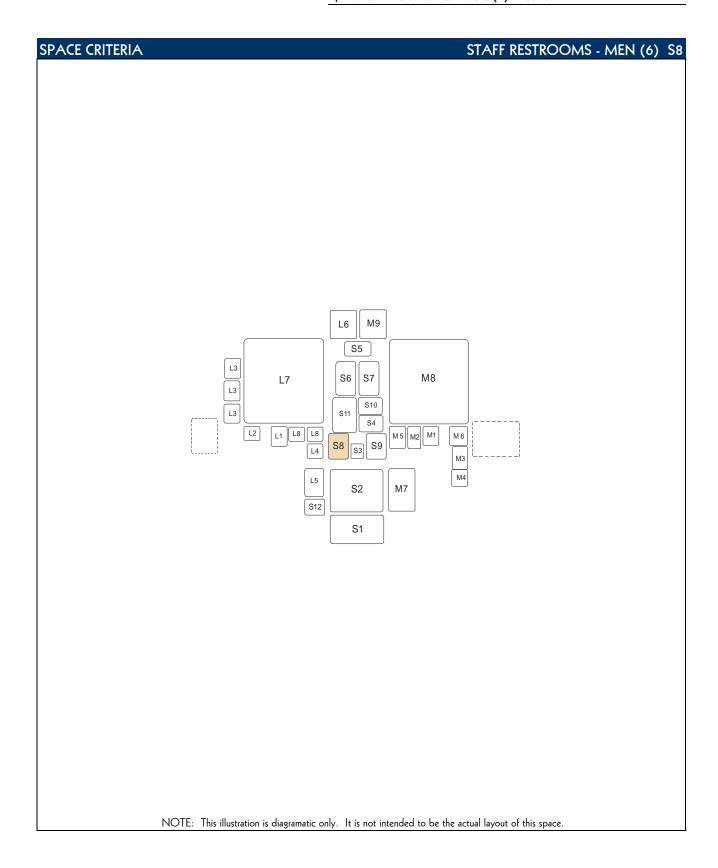
NIO		ITEN 4		NOTE		
NO.	✓	ITEM	Ø	NOTE		
		C T				
1	[X]	Space Type		Open Modular furniture		
		<u> </u>	X	Fixed - private		
2	X	Function	X	Restrooms for public access - men.		
	[FZ]	11 (0 ::	D) A)	F 000 T 500 D 14 5 /000 N C 1		
3	[X]	Hours of Operation		From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays		
		PUBLIC HOURS OF OPERATION:		From: 7:00 a.m. To: 6:00 p.m. Days: M - F Facility Standard		
4	X	Size	X	Width: 10		
4		Size				
				Length: 26 Area: 260		
5	X	Ceiling height		Height from floor: 9 feet		
6	X	Ceiling type		Acoustical Lay-In Ceiling		
- 0		Ceiling type	$\boxtimes$	Sheet Rock		
				Open to Structure		
				Other		
7	[X]	Lighting	×	Direct Fluorescence		
,		Emergency outage lighting.		Indirect Fluorescence		
		Flashing emergency fire lights.		Day Lighting		
		riasining emergency inc name.	$\boxtimes$	Special: Lighting over mirrors/sinks		
8		Number of Occupants		Number: 6; including handicap stall		
9		Number of Visitors		Number: N/A		
10		Security	X	None		
	DLD	& DMV have different hours-secure each facility.		Other:		
		,				
11	X	Equipment Not In Contract (NIC)		Garbage cans - free standing also.		
12	X	Equipment in Construction Contract	X	Stalls (including 1 handicap stall)		
			X	Toilets & Urinals (NOT LoFlow)		
			X	Countertops + Sinks + Mirrors		
			X	Soap & Towel dispensers + Deodorant air fresheners-wall mount		
13		Power Outlets	X	Number of Standard duplex outlets: 4		
14		Special Power		Special outlets and voltage:		
		_				
15		Furniture		Work Chair - Number: Size:		
				Side Chair - Number: Size:		
				Other Chairs - Type: Number: Size:		
			-	Other Chairs - Type: Number: Size:		
				Tables - Type: Number: Size:		
				Tables - Type: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				File - Types: Number: Size:		
				Other:		
			<u> </u>			
1			i .			

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: St	aff Restrooms - Men (6) -	SHARED	

SPA	CE	CRITERIA		STAFF RESTROOMS - MEN (6) SE
NO.	$\square$	ITEM	$\square$	NOTE
16		Floor Finish		Carpet
				Vinyl Tile
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR
				Sealed Concrete
				Other:
17		Base Finish		Rubber
.,		Dasc Fillish		Wood
			×	Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19		Telephone		Number of Outlets:
19		Telephone		Number of Handset: NIC:
				Special:
				opecial.
20		Data		Number of Outlets: None.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
				White Boards Number:
				Other:
22	N	Special HVAC Requirements	$\boxtimes$	Standard
22		Special 1147 (C Requirements		Special Temperature Range:
				Special Humidity Range:
				Special Operating Times:
				Other: Venting - Negative to other rooms.
23		Acoustical Control - N/A	X	Standard
				Special:
24	X	Other Requirements		Lights on motion sensors - 15 minutes.
-		1		Motion sensor flush controls (but not lo-flow toilets).
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR

AGENCY:		DMV 🗆		DLD 🗆	SHARED 🗵
<u> </u>	C. (( D		(1)	CHARED	

Space Name: Staff Restrooms - Men (6) - SHARED



AGENCY:	DMV 🗆	DLD 🗖	SHARED 🗵
Space Name: Sta	ff Restrooms - Women (	6) - SHARED	

## SPACE CRITERIA

## STAFF RESTROOMS - WOMEN (6) S9

NO.	$\overline{\mathbf{A}}$	ITEM	$\overline{\mathbf{v}}$	NOTE
1	X	Space Type		Open Modular furniture
			X	Fixed - private
2	X	Function	X	Restrooms for public access - women.
3	X	Hours of Operation	DMV	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
		PUBLIC HOURS OF OPERATION:		From: 7:00 a.m. To: 6:00 p.m. Days: M - F
			X	Facility Standard
4	X	Size		Width: 10
				Length: 26
				Area: 260
5	X	Ceiling height		Height from floor: 9 feet
6	X	Ceiling type		Acoustical Lay-In Ceiling
			X	Sheet Rock
				Open to Structure
				Other
7	X	Lighting	X	Direct Fluorescence
		Emergency outage lighting.		Indirect Fluorescence
		Flashing emergency fire lights.		Day Lighting
			X	Special: Lighting over mirrors/sinks
8		Number of Occupants		Number: 6; including handicap stall
9		Number of Visitors		Number: N/A
10		Security	X	None
	DLD	& DMV have different hours-secure each facility.		Other:
11	X	Equipment Not In Contract (NIC)		Garbage cans - free standing also.
4.0	-			
12	N.	Equipment in Construction Contract	X	Stalls (including 1 handicap stall) Toilets (NOT LoFlow)
			X	Countertops + Sinks + Mirrors
			×	Soap & Towel dispensers + Deodorant air fresheners-wall mount
			X	Personal hygiene dispenser
13		Power Outlets		Number of Standard duplex outlets: 4
14		Special Power		Special outlets and voltage: Blow dryers?
<del></del>				
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:

AGENCY:	DMV 🗆	DLD 🗖	SHARED 🗵
Space Name: Sta	off Restrooms - Women (6	) - SHARED	

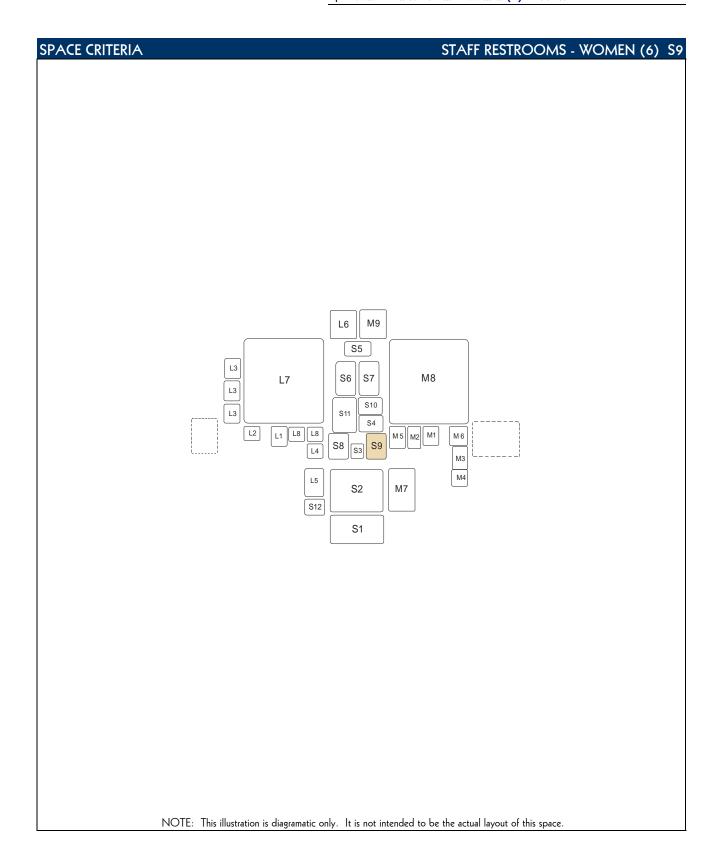
•	$\mathbf{D}$	CE	CDI	TED	1 4
`	$\boldsymbol{\nu}_{\mathbf{A}}$	( -	CRI'	IFK	ΙД
	1/\		$\sim$ $\sim$ $\sim$		1/2

## STAFF RESTROOMS - WOMEN (6) S9

NO.	$\overline{\mathbf{v}}$	ITEM	$\overline{\mathbf{A}}$	NOTE
16	X	Floor Finish		Carpet
				Vinyl Tile
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR
				Sealed Concrete
				Other:
17		Base Finish		Rubber
				Wood
			X	Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19		Telephone		Number of Outlets:
				Number of Handset: NIC:
				Special:
20		Data		Number of Outlets: None.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
				White Boards Number:
				Other:
22	X	Special HVAC Requirements	X	Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times:
				Other: Venting - Negative to other rooms.
23		Acoustical Control - N/A	X	Standard
				Special:
24	X	Other Requirements		Lights on motion sensors - 15 minutes.
				Motion sensor flush controls (but not lo-flow toilets).
				C . TH. CL. FLOOD TO CENTING (1)
			X	Ceramic Tile - Gloss FLOOR TO CEILING / Mosaic tile on FLOOR

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵	
•	C " D \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(4) CLIABED		

Space Name: Staff Restrooms - Women (6) - SHARED



AGENCY:	DMV	DLD 🗖	SHARED 🗵
Space Name: Elec	trical Room - SHARED		

SPACE CRITERIA	ELECTRICAL ROOM \$10
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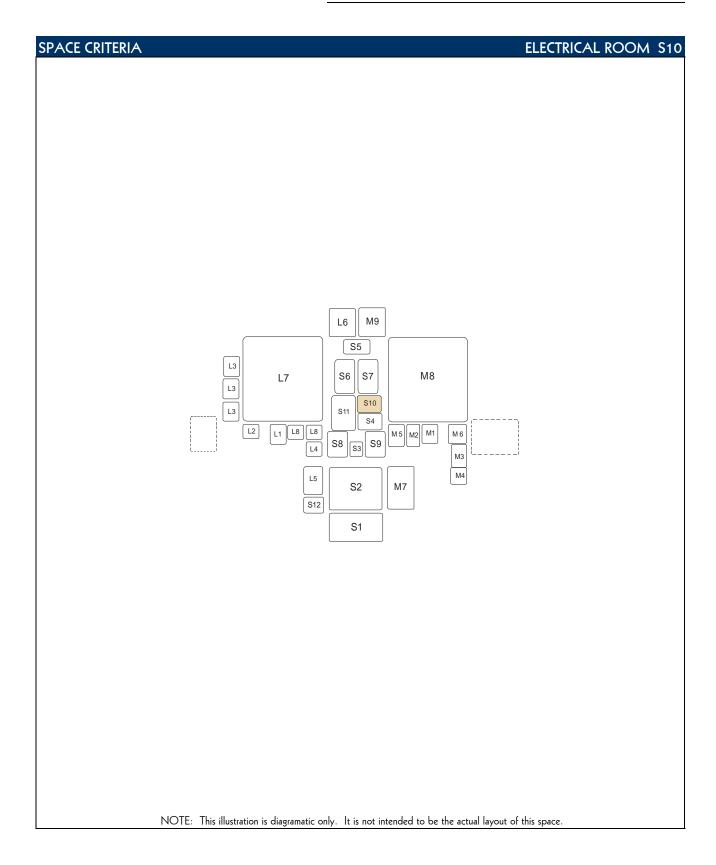
NO		ITEA 4		NOTE
NO.	✓	ITEM	$\square$	NOTE
				_
1	X	Space Type	X	Open Modular furniture
				Fixed - private
2	X	Function	X	Electrical circuit panels / breakers.
3	X	Hours of Operation		24/7
				24/7
	_	0.		Facility Standard
4	X	Size		Width: 12
				Length: 18
_	-	C de L e l		Area: 216
5	X	Ceiling height		Height from floor: Open to structure
6	X	Ceiling type		Acoustical Lay-In Ceiling
				Sheet Rock
				Open to Structure Other
7	X	Lighting	×	Direct Fluorescence
/		Lighting		Indirect Fluorescence
				Day Lighting
				Special Special
8		Number of Occupants		Number: N/A
9		Number of Visitors		Number: N/A
10		Security	X	None
, 0		& DMV have different hours-secure each facility.		Other:
	DLD	a Divivitare unicient hours secure each facility.		Out.
11		Equipment Not In Contract (NIC)		
		Need to verify all equipment.		
12	X	Equipment in Construction Contract		All equipment required.
		Need to verify all required equipment.		
13	X	Power Outlets		Standards for room.
14	X	Special Power		Special outlets and voltage: Standard for room.
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:
1			l	

AGENCY:	DMV 🗆	DLD 🗖	SHARED 🗵
Space Name: Elec	ctrical Room - SHARED		

SPA	CE (	CRITERIA		ELECTRICAL ROOM S10
NO.	$\overline{\mathbf{Q}}$	ITEM		NOTE
16		Floor Finish		Carpet
10		TIOU TIMBI		Vinyl Tile
				Ceramic Tile
			×	Sealed Concrete
				Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19		Telephone		Number of Outlets:
				Number of Handset: NIC:
				Special:
20		Data		Number of Outlets:
				Special power: Standard for room.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: ☐ Manual: ☐
				White Boards Number:
				Other:
		0 110/100		
22	×	Special HVAC Requirements	$\boxtimes$	Standard
			]	Special Temperature Range:
			] [	Special Humidity Range:
			]	Special Operating Times: 24/7
				Other:
23		Acoustical Control - N/A		Standard
23	ш	Acoustical Control - 14/A		Special:
				Special:
24		Other Requirements		
24		Other requirements		

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵

Space Name: Electrical Room - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Me	chanical Room - SHARED		

SPACE CRITERIA MECHAN	IICAL ROOM S	11
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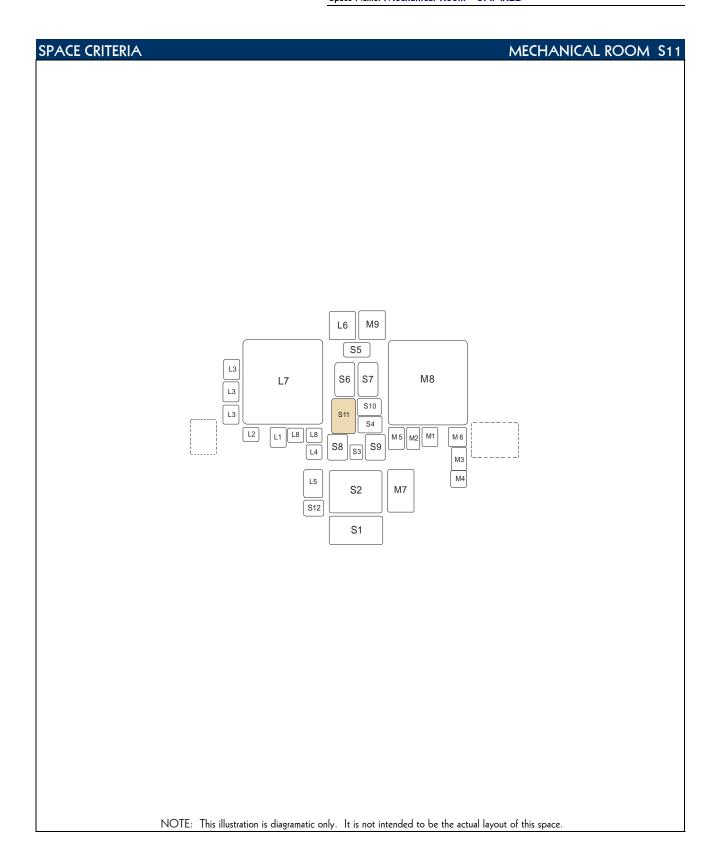
110		ITEA A		NOTE
NO.	✓	ITEM	$\square$	NOTE
	_		_	_
1	X	Space Type	×	Open Modular furniture
				Fixed - private
2	X	Function	X	HVAC Utilities
3	[X]	Hours of Operation	DMV	
			DLD	
		·		Facility Standard
4	[X]	Size		Width: 20
				Length: 25 Area: 500
_	- I			
5	X	Ceiling height		Height from floor: Open to structure
0		Ceiling type		Acoustical Lay-In Ceiling Sheet Rock
			⊠	Open to Structure
				Other
7	☑	Lighting	⊠	Direct Fluorescence
/		ызнинз		Indirect Fluorescence
				Day Lighting
				Special Special
8		Number of Occupants		Number: N/A
9				Number: N/A
10		Security	X	None
10		& DMV have different hours-secure each facility.		Other:
	DLD	a Diviv have amerent hours-secure each facility.		oue.
11		Equipment Not In Contract (NIC)		
		Need to verify all equipment.		
12	X	Equipment in Construction Contract		All equipment required.
		Need to verify all required equipment.		
13	X	Power Outlets		Standards for room.
14	X	Special Power		Special outlets and voltage: Standard for room.
15		Furniture		Work Chair - Number: Size:
				Side Chair - Number: Size:
				Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Med	chanical Room - SHARED		

SPA	CE (	CRITERIA		MECHANICAL ROOM \$11
NO	.7	ITEM		NOTE
NO. 16		Floor Finish		Carpet
10		I loor I mish		Vinyl Tile
				Ceramic Tile
			$\boxtimes$	Sealed Concrete
			Ш	Other:
17	X	Base Finish	X	Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19		Telephone		Number of Outlets:
				Number of Handset: NIC:
				Special:
20		Data		Number of Outlets:
				Special power: Standard for room.
21		Audio Visual	X	None
				Built In Video Projector
				Projector Screen Power: Manual:
				White Boards Number:
				Other:
0.0	[FZ]	C	[27]	C. 1 1
22		Special HVAC Requirements	$\boxtimes$	Standard D. C. L. T. C. D. D. C. C. L. T. C. D. C.
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times: 24/7 Other:
				Other:
23		Acoustical Control - N/A		Standard
23		/ (Coustical Control - 1 4/ )		Special:
				opecial.
24		Other Requirements	1	

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵

Space Name: Mechanical Room - SHARED



AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Loa	ding Dock - SHARED		

LOADING DOCK	512
	LOADING DOCK

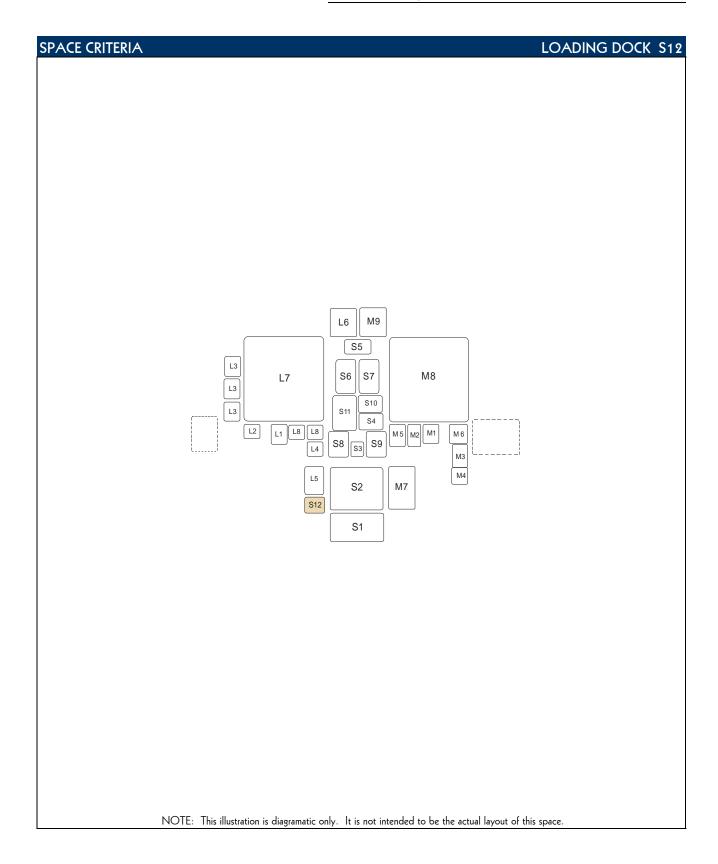
NO.	$\overline{\mathbf{V}}$	ITEM	$\overline{\mathbf{A}}$	NOTE
1	X	Space Type	X	Open Modular furniture
				Fixed - private
2	X	Function		Receiving and shipping for each facility.
3	X	Hours of Operation	DMV	From: 8:00 a.m. To: 5:00 p.m. Days: M - F / 8:00 a.mNoon on Saturdays
			DLD	From: 7:00 a.m. To: 6:00 p.m. Days: M - F
				Facility Standard
4	X	Size		Width: 15
				Length: 20
				Area: 300
5	×	Ceiling height		Open to structure
6	X	Ceiling type		Acoustical Lay-In Ceiling
				Sheet Rock
			$\boxtimes$	Open to Structure
	[V]	1.1		Other Dr
7	X	Lighting		Direct Fluorescence Indirect Fluorescence
				Day Lighting
				Special Special
8		Number of Occupants	Ш	Number: N/A
9	<u> </u>	Number of Occupants  Number of Visitors		Number: N/A
10		Security	X	None
		& DMV have different hours-secure each facility.		Other:
		,		
11		Equipment Not In Contract (NIC)		
		Need to verify all equipment.		
12	X	Equipment in Construction Contract	X	All equipment required.
		Need to verify all required equipment.	X	Scissor Lift.
12	[D]	Power Outlets		Standards for dock.
13	X	Special Power		
14		Special Fower		Special outlets and voltage: Standard for dock.
15		Furniture		Work Chair - Number: Size:
13		Turriture		Side Chair - Number: Size:
			_	Other Chairs - Type: Number: Size:
				Other Chairs - Type: Number: Size:
				Tables - Type: Number: Size:
				Tables - Type: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				File - Types: Number: Size:
				Other:

AGENCY:	DMV 🗆	DLD 🗆	SHARED 🗵
Space Name: Loa	ading Dock - SHARED		

SPA	CE	CRITERIA		LOADING DOCK \$15
NO.	Ŋ	ITEM	$\square$	NOTE
16		Floor Finish		Carpet
10		TIOUT TINIST		Vinyl Tile
				Ceramic Tile
			×	Sealed Concrete
				Other:
17		Base Finish		Rubber
				Wood
				Tile
				Other:
18		Millwork (type and length)	X	None
				Type: Length:
19		Telephone		Number of Outlets:
				Number of Handset: NIC:
				Special:
		2		N 1 (0 )
20		Data		Number of Outlets:
				Special power: Standard for room.
21		Audio Visual	X	None
21		Audio Visual		Built In Video Projector
				Projector Screen Power: Manual: Manual
				White Boards Number:
				Other:
				Outer.
22		Special HVAC Requirements		Standard
				Special Temperature Range:
				Special Humidity Range:
				Special Operating Times:
				Other:
23		Acoustical Control - N/A		Standard
				Special:
24		Other Requirements		

AGENCY:	DMV □	DLD 🗆	SHARED 🗵

Space Name: Loading Dock - SHARED





## **SECTION III - APPENDIX**

- A Sole Source Instructions B Technical Requirements

- B Technical Requirements
  C Geotechnical Report
  D Physical Survey
  E DFCM Design Requirements
  F DFCM Design Process
  G Sivogah Road and Intersection Design Requirements (per Draper City's Standards)

## SECTION III - APPENDIX A

This Appendix contains information about Sole Sourced equipment that will be provided
This Appendix contains information about Sole Sourced equipment that will be provided and installed by the owner during construction.
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# SECTION III - APPENDIX B

This Appendix contains detail Technical Requirements for this facility in CSI MFO 04 outline format.

#### **Special Requirements**

The following instructions are special requirements for this project and will be considered included in the stage two bids:

#### **Definitions**

The term "responsibility," used in the instructions that follow, includes architectural and engineering design, cost, schedule and construction responsibility for completion of this project in accordance with the documents of this Program and RFP for DFCM project no. 07037550, Driver License Division & Department of Motor Vehicles Joint Facility - Draper, Utah. It is the responsibility of the Design Build bidder to provide a complete and fully functioning facility. Omissions in this RFP and Technical Requirements do not relieve the bidder from providing a complete and fully functioning facility.

The term "bidder and design build team" refers to the successful design build team including the General Contractor, the design team, and all associated consultants and subcontractors.

The term "the work" refers to the design and construction of the Driver License Division & Department of Motor Vehicles Joint Facility, including all utility hooks ups, coordination with DFCM for voice, data, multimedia systems, fire protection, security systems, other special systems and all Furniture, Fixtures and Equipment.

Minimum Standards and Conflicts: The RFP and associated program and technical requirements are considered minimum standards. Conflicts between these instructions, DFCM standards and within the RFP shall be brought to the attention of DFCM during Stage II. In general, when there is a conflict the most stringent requirement will be followed. DFCM must approve all products that vary from the stated Standards and requirements of this RFP.

#### **Geotechnical Report and Survey**

DFCM has provided a Geotechnical Report and Survey as part of this proposal information. This Geotechnical Report is provided as general information only and is not a warrant of subsurface conditions. It is the bidders responsibility to verify all geotechnical conditions prior to construction commencing. The bidder is responsible to pay for the services of a Geotechnical Engineer licensed in the State of Utah to coordinate and verify subsurface conditions that are to be addressed and resolved by new construction. It is the bidder's responsibility to also verify the survey.

#### **Testing, Inspection and Commissioning**

DFCM will provide testing, inspection and commissioning. The design build team will coordinate with DFCM for start ups, testing, inspection and all commissioning activities.

#### FF&E

DFCM will be responsible for FF&E procurement, installation and design. The bidder will be responsible for coordination of power, installation and any special design and construction requirements to make the FF&E functional within the facility.

#### Temporary Construction Power, Data and Telecom for Construction

The bidder will be responsible for hook up to these systems and for the cost of these services.

#### **Demolition**

It is the bidders responsibility to perform all demolition required to accomplish the work. The bidder is responsible for fugitive dust control, site erosion control and the coordination with DFCM and Draper City regarding removal of debris from the site.

#### **Schedules**

Time is of the essence and the bidder must provide a critical path method (CPM) schedule at the beginning of the project to be approved by DFCM. This CPM schedule will be prepared by a professional scheduler and will be the measured schedule for the project. Once this initial CPM schedule is established and approved it will be updated monthly with each pay application. The initial CPM schedule cannot be modified except to indicate progress and recovery processes when the CPM schedule is not met. The bidder will also prepare a 3 week look-a-head and critical path only schedule for each job site meeting. A current 3 week look-a-head schedule and the updated CPM schedule must be submitted with each pay application in order for payment approval. The CPM schedule must also identify submittal deadlines and all long lead items required for the project. Bidders who propose an accelerated schedule must keep their proposed finish date for the project. All time between the accelerated finish date the finish date of this RFP will be considered as owners time for move-in.

#### **Weekly Project Meetings**

The bidder will conduct a weekly job site meeting to discuss and coordinate issues with DFCM and the Design Team. The bidder will provide and distribute meeting notes for each meeting. The architect of record's project manager must be in attendance to all job site meetings. Engineers and subcontractors are not required to attend these meeting unless it is necessary to coordinate special issues related to the owner.

#### **Exterior Elements**

Exterior elements such as grills, exhaust and venting elements, utility access points and meters, loading docks, dumpsters, transformers, and all other utilitarian support elements for this facility must be integrated into the design solution and controlled visually to enhance the facility exterior. The roof of this facility is an architectural design element. Roof top mechanical penthouses and other mechanical and building systems will be allowed on the roof but must be part of the architectural design. These elements will not be left to chance scale, color, form, placement and location. Exterior finishes and materials will be durable finishes as per the performance specification of this RFP.

#### **Telephone and Computer Cabling**

The bidder will coordinate with DFCM to provide a complete and operative telephone and computer connectivity system for the facility. The bidder is responsible for: power, cooling, conduit, cabling, Cable trays, and mounting substructures. DFCM is responsible for purchase and installation of the related operation systems including outlets.

#### Security and other speciality Systems

The bidder will coordinate with DFCM to provide a complete and operative systems for the facility. The bidder is responsible for: power, cabling, mounting substructures and outlets. Related operation systems will be provided and installed by DFCM.

#### Carpet

Bidders will be responsible for purchase and installation of carpet, please refer to technical requirements.

#### **Exclusions and Conflicts**

The Bidder will provide a comprehensive list of all exclusions or exceptions from the requirements of this RFP document. This list is required even if exclusion items are indicated in the documents. If conflicts are observed in the RFP documents or if the scope of work is not clearly defined, it is the responsibility of the bidder to notify DFCM of the conflict/clarity issue and request clarification in writing prior to bidding. Without clarification, the more stringent requirements will govern.

#### Questions and Clarification

All questions will be submitted in writing to DFCM - Dave McKay. All clarification will be issued as Addenda.

#### **Utilities and Impact Connections, Permits and Fees**

It is the responsibility of the bidder to coordinate all Utility hook ups with the appropriate entities including Draper City. It is the bidder's responsibility to determine and coordinate schedule and cost of all impact and permit fees required for this project. Water flow tests and the resolution of required water pressure are the responsibility of the bidder.

#### **Hazardous Material**

Removal and control of existing hazardous materials will be the responsibility of the State of Utah.

#### 1% for Arts Allowance

Bidders will provide an allowance to be determined by DFCM to accommodate an art piece or pieces for this project. Bidders will coordinate with selection and installation of this piece. The State of Utah will pay for the actual art piece. This allowance is for possible power requirements, footings or special architectural considerations and will include all costs associated to provide space for the art piece(s).

#### **Specifications**

Bidders will be responsible to develop and submit full construction specifications for this project.

#### **DLD/DMV Standards**

Please note that there are several products that are referred to by brand name by DFCM. These products are required to meet existing DLD/DMV standards. Please see Appendix A for Sole Source Instructions.

#### SECTION 011000 - SUMMARY

#### 1.1 SUMMARY

- A. Work Covered by the Contract Documents:
  - Project Identification: Department of Motor Vehicles + Driver License Division. DFCM Project No. 07037550.
    - a. Project Location: Draper, Utah.
  - 2. Owner: Division of Facilities Construction and Management (DFCM).
  - 3. DFCM Project Coordinator: David McKay.
  - 4. The Work consists of a new single-story building and associated sitework.
- B. Contract: Single design/build contract.
- C. Work Phases: No phases required by Owner.
- D. Work Under Other Contracts:
  - 1. Preceding Work: None.
  - 2. Concurrent Work: Security system, telecom and data systems, queue-system, pneumatic tube system (raceways and pathways provided by contractor).
  - 3. Future Work: Furnishings.
- E. Products Ordered in Advance: None.
- F. Owner-Furnished Contractor-Installed Products:
  - 1. None.
- G. Use of Premises: Full use.
- H. Owner's Occupancy Requirements: Partial.
  - 1. Owner occupancy of completed areas of construction.

END OF SECTION 011000

SUMMARY 011000 - 1

#### SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

#### 1.1 SUMMARY

- A. Minor Changes in the Work: AIA Document G710, "Architect's Supplemental Instructions", issued by Architect.
- B. Proposal Requests: Owner's form.
- C. Change Orders: Owner's form issued after Owner's approval.
- D. Construction Change Directives: Owner's form issued by Architect.

END OF SECTION 012600

#### SECTION 012900 - PAYMENT PROCEDURES

#### 1.1 SUMMARY

#### A. Schedule of Values:

1. Format: Line items based on Project Manual table of contents, coordinated with Contractor's Construction Schedule. Owner's form.

#### B. Applications for Payment:

- 1. Payment Application Times: Indicated in the Agreement.
- 2. Payment Application Forms: Owner's form.
- 3. Special requirements for Initial Application for Payment, Application for Payment at Substantial Completion, and Final Payment Application.

END OF SECTION 012900

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

## 1.1 SUMMARY

- A. Coordination Drawings.
- B. Administrative and supervisory personnel.
- C. Project meetings.
- D. Requests for Information (RFIs). Owner's form.

### 1.2 PROJECT MEETINGS

- A. Preconstruction conference.
- B. Preinstallation Conferences: Before each construction activity that requires coordination with other construction.
- C. Progress Meetings: At weekly intervals, coordinated with preparation of payment requests.
- D. Coordination Meetings: As required, in addition to specific meetings held for other purposes.

## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

### 1.1 SUMMARY

- A. Contractor's Construction Schedule.
- B. Daily construction reports.
- C. Material location reports.
- D. Field condition reports.
- E. Special reports.

### 1.2 QUALITY ASSURANCE

A. Scheduling Specialist: Experienced in CPM scheduling and reporting.

## 1.3 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Comply with Owner requirements.
- B. Schedule Type: CPM.

### 1.4 REPORTS

- A. Material Location Reports: At monthly intervals, a comprehensive list of materials delivered to and stored at Project site.
- B. Field Condition Reports: On discovery of a difference between field conditions and the Contract Documents, submitted with a request for information.
- C. Special Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work.

## SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

## 1.1 SUMMARY

A. Preconstruction and periodic construction photographs.

### 1.2 PRODUCTS

- A. Photographic Media: Digital images, in uncompressed TIFF format.
- B. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties and buildings, including existing items to remain during construction, from different vantage points.
- C. Periodic Construction Photographs: Weekly.

## SECTION 013300 - SUBMITTAL PROCEDURES

### 1.1 SUMMARY

- A. Action Submittals: Information that requires Architect's responsive action.
- B. Informational Submittals: Information that does not require Architect's approval. Submittals may be rejected for not complying with requirements.

### 1.2 PROCEDURES

### A. Action Submittals:

- 1. Action Submittals:
  - a. Product Data.
  - b. Shop Drawings.
  - c. Samples.
  - d. Product schedule or list.
  - e. Contractor's Construction Schedule.
  - f. Submittals Schedule.
  - g. Application for Payment.
  - h. Schedule of Values.
  - Subcontract list.

### B. Informational Submittals:

### 1. Informational Submittals:

- a. Coordination Drawings.
- b. Contractor's Construction Schedule.
- c. Qualification data.
- d. Welding certificates.
- e. Installer certificates.
- f. Manufacturer certificates.
- g. Product certificates.
- h. Material certificates.
- i. Material test reports.
- j. Product test reports.
- k. Research/evaluation reports.
- I. Schedule of tests and inspections.
- m. Preconstruction test reports.
- n. Compatibility test reports.
- o. Field test reports.
- p. Maintenance data.
- q. Design data.
- r. Manufacturer's instructions.

- s. Manufacturer's field reports.
- t. Insurance certificates and bonds.
- u. Construction photographs.
- v. Material Safety Data Sheets.
- C. Delegated-design submittals.
- D. Contractor's Review:
  - 1. Submittals: Marked with approval stamp before submitting to Architect.
- E. Architect's Action:
  - 1. Action Submittals: Stamped with an action stamp and returned.
  - 2. Informational Submittals: Reviewed but not returned, or rejected if it does not comply with requirements.
  - 3. Submittals Not Required: May not be reviewed and may be discarded.

### SECTION 014000 - QUALITY REQUIREMENTS

### 1.1 SUMMARY

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements.

### 1.2 QUALITY ASSURANCE

#### A. Qualifications:

- Installer.
- Manufacturer.
- Fabricator.
- 4. Professional engineer.
- 5. Specialists.
- 6. Testing agency.
- 7. Factory-authorized service representative.
- B. Preconstruction testing.
- C. Mockups: For each form of construction and finish required, using materials indicated for the completed Work. Mockups establish the standard by which the Work will be judged.
  - 1. Disposition: May become part of the Work.

### 1.3 QUALITY CONTROL

- A. Owner Responsibilities: Owner will engage a qualified testing agency to perform quality-control services indicated as Owner's responsibility.
- B. Tests and inspections not explicitly indicated as Owner's responsibility are the Contractor's responsibility.
  - 1. Where services are the Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
- C. Manufacturer's field services.
- D. Associated Services: Access to the Work, taking and storing samples, and delivery of samples to testing agency.

- E. Special Tests and Inspections: Owner will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.
- F. Test and inspection log.
- G. Repair and Protection: Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

### SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

### 1.1 SUMMARY

## A. Temporary Facilities:

- 1. Common-Use Field Office: Prefabricated or mobile units, including meeting room.
- 2. Storage and fabrication sheds.

## B. Temporary Utilities:

- 1. Sewers and drainage.
- 2. Electric Power Service: Pay electric power service use charges for electricity used by all entities engaged in construction activities at Project site.
- 3. Water Service: Pay water service use charges for water used by all entities engaged in construction activities at Project site.
- 4. Sewer and Storm Sewer Service: Pay sewer and storm sewer service use charges for sewer usage, by all parties engaged in construction at Project site.
- 5. Sanitary Facilities: Toilets, wash facilities, and drinking water.
- 6. Heating and cooling facilities.
- 7. Ventilation and humidity control.
- 8. Lighting, including exterior-yard site lighting.
- 9. Telephone Service: At each field office and superintendent's cell phone.
- 10. Electronic communication service including electronic mail and fax.

## C. Support Facilities:

- 1. Temporary Roads and Paved Areas: Located within construction limits.
- 2. Traffic controls.
- 3. Parking: Contractor provided.
- 4. Dewatering facilities and drains.
- 5. Project identification and temporary signs.
- 6. Waste disposal facilities, including a waste management plan for recycling waste materials.
- 7. Lifts and hoists.

### D. Security and Protection Facilities:

- 1. Environmental protection.
- 2. Temporary erosion and sedimentation control.
- 3. Stormwater control.
- 4. Tree and plant protection.
- 5. Site Enclosure Fence: Chain link.
- 6. Security enclosure and lockup.
- 7. Barricades, warning signs, and lights.
- 8. Temporary enclosures.
- 9. Temporary Partitions: Dustproof, gypsum wallboard over one side of studs.

10. Temporary Fire Protection: Fire extinguishers.

### SECTION 016000 - PRODUCT REQUIREMENTS

### 1.1 SUMMARY

- A. Product delivery, storage, and handling.
- B. Requirements for products used on Project.
- C. Construction guarantees and warranties.
- D. Product substitutions.

## 1.2 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft.
- B. Storage: Secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces.

#### 1.3 PRODUCT REQUIREMENTS

A. Product Requirements: Comply with Owner's requirements.

### 1.4 CONSTRUCTION GUARANTEES AND WARRANTIES

A. Guarantees and Warranties: Comply with Owner's requirements.

### 1.5 PRODUCT SUBSTITUTIONS

### A. Conditions:

- 1. Offers Owner a substantial advantage in cost, time, energy conservation after deducting additional responsibilities Owner must assume.
- 2. Does not require extensive revisions to the Contract Documents.
- 3. Consistent with the Contract Documents and will produce indicated results.
- 4. Fully documented and properly submitted.
- 5. Will not adversely affect Contractor's Construction Schedule.
- 6. Has received necessary approvals of authorities having jurisdiction.
- 7. Compatible with other portions of the Work.
- 8. Provides specified warranty.

### SECTION 017300 - EXECUTION

### 1.1 SUMMARY

- A. Construction layout.
- B. Field engineering and surveying.
- C. General installation of products.
- D. Coordination of Owner-installed products.
- E. Progress cleaning.
- F. Starting and adjusting.
- G. Protection of installed construction.
- H. Correction of the Work.

### 1.2 EXECUTION

- A. Existing Conditions: Existence and location of site improvements, utilities, and other construction affecting the Work must be investigated and verified.
- B. Clarification of the Contract Documents: Owner's RFI form.
- C. Construction Layout: Work laid out by land surveyor registered in Utah, using accepted surveying practices; record log maintained.
- D. Field Engineering: Owner will provide property survey.
  - 1. Benchmarks: Two permanent benchmarks established on Project site.
  - 2. Certified surveys of foundation walls and major site improvements.
- E. Installation: Manufacturer's written instructions for installing products.
- F. Owner-Installed Products: Contractor coordinates the Work with work performed by Owner's construction forces.
- G. Progress Cleaning: Project site and work areas cleaned daily. Burying or burning waste materials on-site not permitted.
  - 1. Landfill receipts for hazardous waste disposal.
- H. Starting and Adjusting: Equipment and operating components started, adjusted, and tested to confirm proper operation. Malfunctioning units replaced with new units.

EXECUTION 017300 - 1

- I. Protection of Installed Construction: Maintained until time of Substantial Completion.
- J. Correction of the Work: Defective construction repaired or replaced.

END OF SECTION 017300

EXECUTION 017300 - 2

## SECTION 017329 - CUTTING AND PATCHING

### 1.1 SUMMARY

- A. Cutting and patching required by the following:
  - 1. Installation of other materials.
  - 2. Finishing.
  - 3. Alterations.
  - 4. Tests and inspections.

### 1.2 QUALITY ASSURANCE

- A. Limitations: Do not cut and patch structural, operational, or miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
- B. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching.

## 1.3 EXECUTION

- A. Temporary support of Work being cut.
- B. Cutting: Using hand or small power tools.
- C. Patching: With seams that are as invisible as possible.

## SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

### 1.1 SUMMARY

- A. Recycling nonhazardous demolition and construction waste.
- B. Disposing of nonhazardous demolition and construction waste.

### 1.2 PERFORMANCE GOALS

A. Recycle Goals: As much demolition and construction waste as possible.

### 1.3 WASTE MANAGEMENT PLAN

- A. Types and quantities of demolition site-clearing and construction waste.
- B. Type of waste and whether it will be recycled, or disposed of in landfill or incinerator.
- C. Net additional cost or net savings resulting from waste management plan.

### 1.4 RECYCLING WASTE

A. Recycling Incentives: Revenues and other incentives for recycling will accrue to Contractor.

### 1.5 WASTE DISPOSAL

- A. General: Except for items or materials to be recycled, or otherwise reused, remove waste materials from Project site.
  - 1. Burning: Do not burn waste materials.
  - 2. Disposal: Transport waste materials off Owner's property and legally dispose of them.

### SECTION 017700 - CLOSEOUT PROCEDURES

### 1.1 SUMMARY

- A. Inspection procedures.
- B. Warranties.
- C. Final cleaning.

### 1.2 PROCEDURES

- A. Substantial Completion: Before inspection:
  - 1. Comply with Owner's requirements for Substantial Completion.
    - a. Substantial Completion Form: Owner's form.
  - 2. List of incomplete items (punch list).
  - 3. Owner advised of insurance changeover.
  - 4. Spare parts and extra materials delivered.
  - 5. Final changeover of locks performed.
  - 6. Startup testing completed.
  - 7. Test/adjust/balance records submitted.
  - 8. Temporary facilities removed.
  - 9. Owner advised of utility changeover.
  - 10. Final cleaning performed.
  - 11. Touchup performed.
- B. Final Completion: Before final inspection:
  - 1. Comply with Owner's requirements for Final Payment.
  - 2. Final Application for Payment submitted.
  - 3. List of incomplete items (punch list) endorsed by Architect as completed.
  - 4. Consent of Surety to Final Payment.
  - 5. Project Record Documents submitted.
  - 6. Warranties submitted.
  - 7. Project operation and maintenance manuals submitted.
  - 8. Evidence of continuing insurance coverage submitted.
  - 9. Releases, occupancy permits, and operating certificates obtained.
  - 10. Owner's personnel instructed in operation, adjustment, and maintenance of equipment and systems, including demonstration and training videotapes submitted.
- C. Warranties:

- 1. Organized and bound in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, with paper dividers. Binder front and spine identified with title, Project name, and name of Contractor.
- D. Final Cleaning: Each surface or unit cleaned to condition expected in an average commercial building cleaning and maintenance program.
  - 1. Clean ducts, blowers, and coils for units operated without filters during construction.

### SECTION 017823 - OPERATION AND MAINTENANCE DATA

### 1.1 SUMMARY

A. Emergency operation and maintenance manuals.

### 1.2 PRODUCTS

- A. Manuals: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, minimum four copies.
- B. Emergency Manuals: Types of emergencies, emergency instructions, and emergency procedures.
- C. Operation Manuals: System and equipment descriptions, operating procedures, wiring diagrams, control diagrams and sequence of operation, and piped system diagrams.
- D. Product Maintenance Manuals: Source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds.
- E. System and Equipment Maintenance Manuals: Source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds.

## SECTION 017839 - PROJECT RECORD DOCUMENTS

## 1.1 SUMMARY

- A. Record drawings and specifications.
- B. Record modifications including addenda, change orders, and other modifications.
- C. Record submittals including approved shop drawings, product data, samples, and similar submittals.

## 1.2 SUBMITTALS

A. Record Documents: One set submitted to Owner at completion of project.

### 1.3 PRODUCTS

A. Record Documents: Marked weekly to record changes and selections make during construction.

## SECTION 017900 - DEMONSTRATION AND TRAINING

## 1.1 SUMMARY

- A. Demonstration and training in operation and maintenance of operation of systems and equipment.
- B. Demonstration and training videotapes.

### 1.2 INSTRUCTION PROGRAM

- A. Program Structure: Training modules for each system and equipment not part of a system, including the following:
  - 1. Basis of system design, operational requirements, and criteria.
  - 2. Documentation.
  - 3. Emergencies.
  - 4. Operations.
  - 5. Adjustments.
  - 6. Troubleshooting.
  - 7. Maintenance.
  - 8. Repairs.
- B. Facilitator to prepare instruction program and training modules.

### SECTION 033000 - CAST-IN-PLACE CONCRETE

### 1.1 SUMMARY

- A. Cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
  - 1. Footings.
  - Foundation walls.
  - 3. Slabs-on-grade.

### 1.2 QUALITY ASSURANCE

A. Quality Standard: ACI 301.

### 1.3 MATERIALS

- A. Form-facing materials.
  - 1. Smooth-Formed Finished Concrete: Medium density overlay panels (5 by 10 ft) Class I or better, mill-release agent treated and edges sealed.
  - 2. Rough-Formed Finished Concrete: Plywood, metal, or other approved material.

#### B. Steel Reinforcement:

- 1. Reinforcing Bars: Deformed, ASTM A615 grade 60 typical.
- 2. Welded Wire Reinforcement: Plain.

### C. Concrete Materials:

- 1. Portland Cement: ASTM C 150, Type I/II, gray, supplemented with fly ash, 10% maximum.
- 2. Silica fume.
- 3. Aggregate: ASTM C33 Normal weight typical.
- Water.
- Admixtures: Air entraining; Water reducing; Retarding; Water reducing and retarding, High range, water reducing, High range, water reducing and retarding, Plasticizing and retarding. Admixtures shall comply with ASTM C260 for air entrained concrete.
- D. Vapor Retarders: Class A sheet.
- E. Curing Materials: Clear, waterborne, chemical curing compound that does not interfere with bonding of finish floor materials.
- F. Floor and Slab Treatments At Exposed Concrete Floors: Penetrating liquid curing, sealing, and hardening floor treatment.

- G. Related Materials: Expansion- and isolation-joint-filler strips, reglets, dovetail anchor slots.
- H. Repair Materials: Underlayment and overlayment.

### 1.4 CONCRETE MIXTURES

- A. Minimum compressive Strength (28 Days):
  - 1. Footings: 3000 psi.
  - 2. Foundation Walls: 4000 psi.
  - 3. Slabs-on-Grade: 4000 psi.
- B. Mixing: Ready mixed.

### 1.5 INSTALLATION

- A. Formed-Surface Finish: Rough-formed at unexposed surfaces. Smooth-formed at exposed surfaces.
- B. Vapor Retarder: Provide under floor areas receiving moisture sensitive flooring including resilient flooring.
- C. Floor and Slab Finishes:
  - 1. Float: Surfaces to receive trowel finish.
  - 2. Trowel: Surfaces exposed to view, and surfaces to be covered with resilient flooring, carpet, ceramic tile set over a crack isolation membrane, paint, and thin film-finish coating systems.
  - 3. Trowel and Fine Broom: Surfaces to be covered with ceramic tile installed by thickset method.
  - 4. Medium Broom: Exterior concrete platforms, steps, and ramps.

### 1.6 FIELD QUALITY CONTROL

- A. Testing: By Owner-engaged agency.
- B. Inspections: By Owner-engaged special inspector.

## SECTION 042000 - UNIT MASONRY

### 1.1 SUMMARY

- A. Masonry Construction:
  - 1. Masonry veneer.

### 1.2 QUALITY ASSURANCE

A. Mockups of typical wall areas.

#### 1.3 MATERIALS

- A. Brick: Face brick ASTM C 216, SW, FBX.
  - 1. Color: As approved by Owner.
  - 2. Size: 3-5/8 inches wide by 2-1/4 inches high by 7-5/8 inches long.
- B. Masonry Joint Reinforcement:
  - 1. Exterior Walls: Hot-dip galvanized, carbon steel.
- C. Ties and Anchors: Galvanized steel.
  - 1. Adjustable Masonry-Veneer Anchors: Screw attached slip-in and seismic with continuous single wire joint reinforcement of minimum wire size W1.7.
- D. Embedded Flashing:
  - 1. Concealed (Flexible) Flashing: Copper laminated, 5 oz/sq. ft minimum.
    - a. Used with stainless-steel drip edges and flashing terminations.
- E. Weep/Vents: Cellular plastic.
- F. Cavity Drainage Material: Free-draining polymer mesh.
- G. Mortar: Pigmented or natural color as selected by Owner
  - 1. Masonry cement and mortar cement not allowed.

## 1.4 INSTALLATION

A. Bond: Running.

UNIT MASONRY 042000 - 1

- 1.5 FIELD QUALITY CONTROL
  - A. Testing Agency: Owner engaged.

END OF SECTION 042000

UNIT MASONRY 042000 - 2

### SECTION 051200 - STRUCTURAL STEEL FRAMING

### 1.1 SUMMARY

A. Structural-steel framing.

### 1.2 QUALITY ASSURANCE

- A. Fabricator Qualifications: State of Utah (DFCM) Approved Structural Steel Fabricator/Manufacturer.
- B. Quality Standard: AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design and Load and Resistance Factor Design Specification for Structural Steel Buildings."

### 1.3 MATERIALS

- A. Structural-Steel Shapes:
  - 1. W-shapes: ASTM A992, Fy = 50 ksi.
  - 2. Channels, angles, M-shapes, S-shapes, plate and bar: ASTM A36, Fy = 36 ksi.
  - 3. Cold-formed hollow structural sections: ASTM A500, Grade B.
  - 4. Steel pipe: ASTM A53 Grade B.
- B. Bolts, Nuts, and Washers: ASTM A325...
- C. Anchor Rods: ASTM F1554, Grade 36 with ASTM A563 heavy hex nuts and ASTM F436 hardened washers .
- D. Connectors: Headed Stud Anchors, ASTM A108, with dimensions complying with AISC specifications.
- E. Primer: Fabricator's standard, nonasphaltic.
- F. Grout: Nonmetallic, shrinkage resistant.

### 1.4 FABRICATION

- A. Shop Connections: Pretensioned high-strength bolts at seismic critical connections, snug-tightened high-strength bolts at all other connections and welded connections.
- B. Surface Preparation: SSPC-SP 3.
- C. Galvanizing: Hot dip.

- 1.5 INSTALLATION
  - A. Field Connections: Pretensioned high-strength bolts at seismic critical connections, snug-tightened high-strength bolts at all other connections and welded connections.
- 1.6 FIELD QUALITY CONTROL
  - A. Testing Agency: Owner engaged.

## SECTION 052100 - STEEL JOIST FRAMING

### 1.1 SUMMARY

- A. Open-web K-series steel joists for roof framing.
- B. KCS-type, open-web K-series steel joists for roof framing.
- C. K-series steel joist substitutes for roof framing.
- D. LH-series long-span steel joists for roof framing.
- E. Joist girders for roof framing.
- F. Special joists for roof framing, designed by manufacturer.
- G. Joist accessories, including permanent bridging.

### 1.2 MATERIALS

- A. Bolts: High-strength carbon steel.
  - 1. Finish: Plain, uncoated.
- B. Primer: Manufacturer's standard.
- C. Open-Web K-Series Steel Joists: With top-chord extensions or extended ends as needed.
- D. Joist Girders:
  - 1. End Arrangement: Underslung with bottom-chord extensions.
  - 2. Top-Chord Arrangement: Parallel.

### 1.3 INSTALLATION

A. Connections: Welded or Bolted.

## 1.4 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage testing agency to inspect field welds and bolted connections.

## SECTION 053100 - STEEL DECKING

### 1.1 SUMMARY

A. Roof deck.

### 1.2 QUALITY ASSURANCE

- A. Steel roof deck shall comply with the latest requirements of the Steel Deck Institute (SDI).
- B. FMG Listing: Steel roof deck.

### 1.3 MATERIALS

- A. Roof Deck: Galvanized steel sheet.
  - 1. Profile Depth: 1-1/2 inches or 3 inches.
- B. Accessories: Flexible closure strips, pour stops, girder fillers, column closures, end closures, Z-closures, and cover plates, recessed sump pans, and flat sump plates.

### 1.4 INSTALLATION

A. Roof Deck: Welded.

### 1.5 FIELD QUALITY CONTROL

A. Testing Agency: Owner engaged.

### **END OF SECTION 053100**

STEEL DECKING 053100 - 1

### SECTION 054000 - COLD-FORMED METAL FRAMING

### 1.1 SUMMARY

A. Exterior non-load-bearing wall framing.

### 1.2 PERFORMANCE REQUIREMENTS

#### A. Structural Performance:

- 1. Dead Loads: Self weight of exterior cladding system.
- 2. Wind Loads: Per ASCE 7-02, 90 mph basic wind speed (3-second gust), exposure category C.
- 3. Seismic Loads: Per ASCE 7-02, Sds = 0.80g, ap = 1.0, Rp = 2.5, Seismic Design Category D.
- 4. Deflection Limits: . 1/360.
- B. Engineering design of cold-formed metal framing by Contractor.

### 1.3 QUALITY ASSURANCE

A. Design Standard: AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" and its "Standard for Cold-Formed Steel Framing - General Provisions."

### 1.4 MATERIALS

- A. Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, metallic coated.
- B. Exterior Non-Load-Bearing Wall Framing: Standard C-shaped, punched steel studs and U-shaped, unpunched track.
  - 1. Minimum Steel Thickness: 0.0428 inch (1.09 mm).
  - 2. Connection to structure shall accommodate vertical deflection and horizontal inter-story drift with vertical deflection clips, single deflection track, drift clips and Double deflection track.
- C. Framing Accessories: Supplementary framing, bracing, bridging, solid blocking, web stiffeners, stud kickers and girts.
- D. Insulation for inaccessible voids.

## 1.5 INSTALLATION

A. Fasten framing by welding or screw fastening.

- 1. Exterior Non-Load-Bearing Wall Stud Spacing: 16 inches (406 mm).
- 1.6 FIELD QUALITY CONTROL
  - A. Testing: By Owner-engaged agency.

### SECTION 055000 - METAL FABRICATIONS

### 1.1 SUMMARY

- A. Miscellaneous metal framing and supports.
- B. Loose metal plates and shapes.
- C. Miscellaneous fabricated metal items.

### 1.2 PRODUCTS

- A. Materials: Steel plates, shapes, and bars. Steel tubing and pipe. Galvanize at exterior locations.
- B. Miscellaneous Framing and Supports:
  - 1. Steel framing and supports for items including; operable partitions, overhead doors, countertops, mechanical and electrical equipment, applications where framing and supports are not specified in other Sections.
- C. Loose steel lintels.
- D. Shelf angles.
- E. Loose bearing and leveling plates.
- F. Steel weld plates and angles not specified in other Sections, for casting into concrete.
- G. Structural-Steel Door Frames:
  - 1. Galvanize exterior locations.
  - 2. Prime interior locations with zinc-rich primer.
- H. Metal Ladders: Steel.
  - 1. Prime interior locations with zinc-rich primer.
- I. Metal Bollards: Schedule 40 galvanized steel pipe.

## SECTION 055213 - PIPE AND TUBE RAILINGS

## 1.1 SUMMARY

- A. Steel pipe railings (interior)
- B. Aluminum pipe railings (exterior).
- C. DFCM Design Requirement: Members on guards not allowed to create ladder effect.

## 1.2 FABRICATION

A. Connections: Welded.

## 1.3 FINISHES

A. Steel: Primed with universal shop primer.

B. Aluminum: Power-coated.

1. Color: As approved by Owner.

# SECTION 057500 - DECORATIVE FORMED METAL

- 1.1 SUMMARY
  - A. Formed-Metal Items Include:
    - 1. Closures and trim.
- 1.2 MATERIALS
  - A. Closures and Trim: Aluminum.
- 1.3 FINISHES
  - A. Aluminum: High-performance organic finish.

## SECTION 061000 - ROUGH CARPENTRY

### 1.1 SUMMARY

- A. Wood blocking and nailers.
- B. Plywood backing panels.

### 1.2 MATERIALS

- A. Wood-Preservative-Treated Lumber:
  - 1. Preservative Treatment: AWPA C2 with chemicals containing no arsenic or chromium.
  - 2. Application: Items include:
    - a. Items in contact with roofing.
    - b. Items in contact with concrete or masonry.
- B. Fire-Retardant-Treated Materials:
  - 1. Interior Type A, unless otherwise indicated.
  - 2. Application: Items include:
    - a. Where required by building code.
    - b. Plywood backing panels.
- C. Dimension Lumber Framing:
  - 1. Maximum Moisture Content: 19 percent.
  - 2. Blocking and Nailers: Construction or No. 2 grade Douglas fir-larch.
- D. Plywood backing panels for telephone and electrical equipment.
- E. Fasteners: Hot-dip galvanized steel where exposed to weather, in ground contact, in contact with treated wood, or in area of high relative humidity.

END OF SECTION 061000

ROUGH CARPENTRY 061000 - 1

### SECTION 061603 - GYPSUM SHEATHING

### 1.1 SUMMARY

A. Gypsum sheathing attached to steel framing members of exterior walls.

### 1.2 QUALITY ASSURANCE

A. Fire-resistance ratings were determined by fire-response testing assemblies according to ASTM E 119.

#### 1.3 GYPSUM SHEATHING BOARD

- A. Paper-Surfaced Gypsum Sheathing Board with Water-Resistant Core: ASTM C 79, with water-resistant material incorporated into the core and with water-repellent paper bonded to the core's face, back, and long edges.
  - 1. Type and Thickness: Type X, 5/8 inch thick.
  - 2. Edge and End Configuration: Square.
  - 3. Size: 48 by 96 inches.

## 1.4 ACCESSORY MATERIALS

- A. Air-Infiltration Barrier: Proprietary building wrap with flame-spread and smokedeveloped ratings of less than 25 and 450, respectively, when tested according to ASTM E 84.
  - a. Polyethylene sheet;
  - b. Polypropylene sheet;
  - c. Laminated polyethylene sheet
  - d. Woven polyolefin sheet;
- B. Fasteners: Steel drill screws.

### 1.5 INSTALLATION

A. General: Install gypsum sheathing to comply with GA-253 and manufacturer's written instructions.

## SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK

### 1.1 SUMMARY

- A. Interior standing and running trim.
- B. Plastic-laminate cabinets.
- C. Plastic-laminate countertops.
- D. Utility shelving.

## 1.2 QUALITY ASSURANCE

A. Quality Standard: AWI.

### 1.3 MATERIALS

- A. Interior Standing and Running Trim:
  - 1. Lumber Trim for Transparent Finish: Red oak or equivalent as approved by Owner.
- B. Cabinet Hardware:
  - 1. Hinges: Frameless, concealed.
  - 2. Pulls: Wire.
  - 3. Locks: Door and drawer where required by Owner.
- C. Plastic-Laminate Cabinets:
  - 1. Grade: Custom.
  - 2. AWI Type of Cabinet Construction: Flush overlay.
  - 3. Cabinet Interior: Thermoset decorative panels.
- D. Plastic-Laminate Countertops:
  - 1. Grade: Custom.
  - 2. Edge Treatment: Plastic laminate.
- E. Utility Shelving: Custom grade. Thermoset decorative panels.
- F. Colors: As approved by Owner.

## SECTION 072100 - THERMAL INSULATION

## 1.1 SUMMARY

## A. Applications:

- 1. Perimeter insulation under slabs-on-grade.
- 2. Perimeter wall insulation (supporting backfill).
- 3. Concealed building insulation.
- 4. Vapor retarders.

### 1.2 MATERIALS

### A. Insulation:

- 1. Extruded-Polystyrene Board: Type IV, 1.60 lb/cu. ft..
- 2. Unfaced Glass-Fiber Blanket: Type I.
- B. Vapor Retarders: Reinforced polyethylene. Fire retardant if required by building code.
- C. Auxiliary Insulating Materials:
  - 1. Insulation adhesives and fasteners.

## SECTION 072416 - DIRECT APPLIED EXTERIOR FINISH SYSTEM (DEFS)

#### 1.1 SUMMARY

A. Direct-Applied Exterior Finish System (DEFS) applied over glass-mat gypsum board (exterior soffits).

### 1.2 QUALITY ASSURANCE

A. Mockups for each form of construction and finish.

## 1.3 MATERIALS

- A. Glass-Mat Gypsum Board: 5/8 inch thick.
- B. Reinforcing Mesh: Standard.
- C. Primer: Manufacturer's standard.
- D. Base-Coat Materials: Factory-blended polymer-emulsion adhesive and portland cement dry mix to which only water is added.
- E. Finish-Coat Materials: Standard acrylic-based coating.
- F. Trim Accessories: PVC.
- G. Elastomeric Sealants: Multicomponent, nonsag urethane.

### 1.4 INSTALLATION

A. Finish Coat: Applied over primer.

## SECTION 075400 - THERMOPLASTIC MEMBRANE ROOFING

#### 1.1 SUMMARY

- A. Mechanically fastened membrane roofing system.
- B. Vapor retarder (if required).
- C. Roof insulation.
- D. Comply with Owner's Roofing Requirements for TPO roofing.

### 1.2 PERFORMANCE REQUIREMENTS

- A. Roofing System Design: Uplift pressures calculated according to ASCE 7.
- B. FMG Listing: Class 1A- 90.

## 1.3 QUALITY ASSURANCE

- A. Exterior Fire-Test Exposure: Class A.
- B. Preliminary roofing and preinstallation conference.
- C. Comply with Owner's requirements for low slope roofing manufactures.
- D. Comply with Owner's list of approved manufacturers and installers.

### 1.4 WARRANTY

- A. Manufacturer's Materials and Workmanship Warranty: 20 years.
  - 1. Warranty form: DFCM standard.
- B. Installer's Warranty: 5 years.

### 1.5 MATERIALS

- A. Thermoplastic Polyolefin Roofing Membrane: Reinforced thermoplastic sheet, complying with ASTM D 6878-03.
  - 1. Thickness: 60 mils (57 mils minimum) polymer thickness, not overall thickness.
- B. Sheet Flashing: Unreinforced thermoplastic polyolefin.

- C. Substrate Board: As required for rating.
- D. Roof Insulation: Polyisocyanurate board.
- E. Cover Board: Glass-mat, water-resistant gypsum substrate.
- F. Walkways: Pads.

## 1.6 INSTALLATION

- A. Roof Insulation: Mechanically fastened.
- B. Roofing Membrane: Mechanically fastened.
  - 1. Attachment Method for Mechanically Fastened: In splice.

## 1.7 FIELD QUALITY CONTROL

A. Testing Agency: Owner engaged.

## SECTION 076200 - SHEET METAL FLASHING AND TRIM

#### 1.1 PERFORMANCE REQUIREMENTS

A. Roof Edge Flashing and Copings: Capable of resisting forces according to FMG Loss Prevention Data Sheet 1-49.

### 1.2 QUALITY ASSURANCE

A. Quality Standard(s): SMACNA's "Architectural Sheet Metal Manual".

### 1.3 WARRANTY

A. Fluoropolymer Finishes: 20 years.

#### 1.4 MATERIALS

#### A. Sheet Metals:

- 1. Metallic-Coated Steel Sheet: Zinc-coated (galvanized) steel sheet with smooth, flat surface.
  - a. Coil-Coated Finish: Two-coat fluoropolymer.
    - 1) Color: As approved by Owner.
  - b. Galvanized finish at equipment support curbs.

#### 1.5 PRODUCTS

- A. Manufactured Flashing and Trim:
  - 1. Reglets and Counterflashing: Metallic-coated steel sheet with coil coated finish.
    - a. Types: Surface-mounted.
    - b. Accessories: Flexible-flashing retainer, counterflashing wind-restraint clips.
- B. Formed Low-Slope Roof Fabrications: Including roof-edge flashing, copings, roof expansion-joint covers, counterflashing, flashing receivers, roof-penetration flashing, and roof-drain flashing.
- C. Miscellaneous Formed Fabrications: Including equipment support flashing.

#### SECTION 078413 - PENETRATION FIRESTOPPING

#### 1.1 SUMMARY

A. Through-penetration firestop systems for penetrations through fire-resistance-rated assemblies.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. Provide through-penetration firestop systems with the following ratings determined per ASTM E 814 or UL 1479:
  - 1. F-Rated Systems: F-ratings equaling or exceeding fire-resistance rating of constructions penetrated.
  - 2. T-Rated Systems: For penetrations located outside wall cavities and outside fireresistance-rated shaft enclosures.

### 1.3 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Tested per ASTM E 814 by UL and listed in the UL "Fire Resistance Directory".

#### 1.4 MATERIALS

- A. Fill Materials: Provide fill materials complying with performance and quality assurance requirements.
- B. Accessories: Permanent forming/damming/backing materials, temporary forming materials, substrate primers, collars, and steel sleeves as needed to comply with performance and quality assurance requirements.

## 1.5 INSTALLATION

A. Identification: Preprinted metal or plastic labels, permanently attached.

### 1.6 FIELD QUALITY CONTROL

A. Inspection of Installed Firestop Systems: By Owner-engaged agency according to ASTM E 2174 requirements.

### SECTION 078446 - FIRE-RESISTIVE JOINT SYSTEMS

#### 1.1 SUMMARY

- A. Fire-resistive joint systems for the following:
  - 1. Head-of-wall joints.
  - 2. Wall-to-wall joints.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance Ratings of Joint Systems in and between Fire-Resistance-Rated Constructions: Equaling or exceeding the fire-resistance ratings of construction that they join, and movement capabilities indicated, as determined by ASTM E 1966 or UL 2079.
- B. Ratings of Perimeter Fire-Resistive Joint Systems: As indicated, determined by ASTM E 119.

### 1.3 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Tested by UL.

#### 1.4 MATERIALS

A. Materials: Fill materials, forming materials, and other components complying with performance and quality assurance requirements.

### 1.5 FIELD QUALITY CONTROL

A. Testing: By Owner-engaged agency.

## SECTION 079200 - JOINT SEALANTS

#### 1.1 SUMMARY

- A. Exterior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces include:
  - 1. Control and expansion joints in unit masonry.
  - 2. Perimeter joints around frames of doors, windows, and louvers.
- B. Exterior Joints in Horizontal Traffic Surfaces include:
  - 1. Isolation and contraction joints in cast-in-place concrete slabs.
- C. Interior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces include:
  - 1. Control and expansion joints on exposed interior surfaces of exterior walls.
  - 2. Perimeter joints of exterior openings.
  - 3. Vertical joints on exposed surfaces of interior walls and partitions.
  - 4. Perimeter joints between interior wall surfaces and frames of interior doors and windows.
  - 5. Joints between plumbing fixtures and adjoining walls, floors, and counters.
- D. Interior Joints in Horizontal Traffic Surfaces include:
  - 1. Isolation joints in cast-in-place concrete slabs.
  - 2. Control and expansion joints in tile flooring.

### 1.2 QUALITY ASSURANCE

- A. Preconstruction compatibility, adhesion, and stain testing.
- B. Product testing.
- C. Preconstruction field-adhesion and stain testing.
- D. Mockups.

## 1.3 WARRANTY

- A. Installer: Two years.
- B. Manufacturer: Two years.

#### 1.4 MATERIALS

A. Elastomeric Joint Sealants: Liquid applied, chemically curing; ASTM C 920.

JOINT SEALANTS 079200 - 1

- 1. Neutral-curing silicone sealants.
- 2. Nonsag and pourable urethane sealants.
- 3. Mildew-resistant neutral-curing silicone sealants.
- B. Latex Joint Sealants: ASTM C 834, Type P, Grade NF.
- C. Acoustical Joint Sealants: Latex.
- D. Joint-Sealant Backing: Cylindrical.

## 1.5 FIELD QUALITY CONTROL

A. Field-adhesion testing for sealant adhesion to joint substrates.

END OF SECTION 079200

JOINT SEALANTS 079200 - 2

## SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

#### 1.1 SUMMARY

A. Standard hollow metal doors and frames.

#### 1.2 QUALITY ASSURANCE

- A. Standard Hollow Metal Quality Standard: ANSI/SDI A250.8.
- B. Fire-Rated Doors and Frames: Positive-pressure testing.

#### 1.3 PRODUCTS

- A. Standard Hollow Metal Doors:
  - 1. Design: Flush panel.
  - 2. Thermal-Rated Doors: Exterior.
  - 3. Exterior Doors: Metallic-coated steel sheet faces.
    - a. Level 2 and Physical Performance Level B (Heavy Duty).
    - b. Model: 1 (Full Flush).
  - 4. Interior Doors: Cold-rolled steel sheet faces.
    - a. Level 2 and Physical Performance Level B (Heavy Duty).
    - b. Model: 1 (Full Flush).

#### B. Standard Hollow Metal Frames:

- 1. Exterior Frames: Metallic-coated steel sheet; full profile welded.
  - a. Frames for Level 2 Steel Doors: 0.053-inch- thick steel sheet.
- 2. Interior Frames: Cold-rolled steel sheet; full profile welded.
  - a. Frames for Level 2 Steel Doors: 0.053-inch- thick steel sheet.
  - b. Frames for Wood Doors: 0.053-inch- thick steel sheet.
  - c. Frames for Borrowed Lights: 0.053-inch- thick steel sheet.

#### C. Accessories:

- 1. Moldings and stops for glazed lites.
- 2. Louvers: Steel.
- D. Finishes: Factory priming for field painting.

- 1.4 INSTALLATION
  - A. Metal-Stud Partitions: Frames filled with insulation.

## SECTION 081416 - FLUSH WOOD DOORS

### 1.1 QUALITY ASSURANCE

- A. Quality Standard: WDMA.
- B. Fire-Rated Wood Doors: Positive pressure testing.

### 1.2 WARRANTY

- A. Materials and Workmanship: Includes repair or replacement, and installation and finishing that may be required due to repair or replacement of defective doors.
  - 1. Solid-Core Interior Doors: Life of installation.

# 1.3 DOOR CONSTRUCTION, GENERAL

- A. WDMA I.S.1-A Performance Grade:
  - 1. Heavy Duty.

#### 1.4 VENEERED-FACED DOORS FOR TRANSPARENT FINISH

- A. Interior Solid-Core Doors:
  - 1. Grade: Premium (Grade A faces).
  - 2. Species and Cut: Red oak, plain sliced (flat sliced), or equivalent approved by Owner.
  - 3. Match between Veneer Leaves: Book match.
  - 4. Assembly of Veneer Leaves on Door Faces: Balance match.
  - 5. Special Matching:
    - a. Pair and set match.
  - 6. Core: Particleboard.
  - 7. Construction: Five or seven plies, bonded.
- B. Fire-Protection-Rated Doors: Provide core specified or mineral core as needed to provide fire-protection ratings.
  - 1. Edge Construction: Provide edge construction with intumescent seals concealed by outer stile.
- C. Blocking: Provide blocking as required to eliminate through bolting hardware.

#### 1.5 LOUVERS AND LIGHT FRAMES

- A. Louvers: Steel with baked enamel or powder coated finish.
  - 1. Fire-Door Louvers: Fusible links.
- B. Light-Opening Frames:
  - 1. Wood beads.
  - 2. Wood-veneered beads for fire doors.

### 1.6 FABRICATION

- A. Fabrication:
  - 1. Factory fit doors to frames.
  - 2. Factory machine doors for hardware.
  - 3. Factory glaze doors.

### 1.7 FINISHING

- A. Factory Finishing: All doors.
- B. Transparent Factory Finishes:
  - 1. Grade: Premium.
  - 2. Finish: Catalyzed polyurethane.
  - 3. Effect: Open-grain finish.
  - 4. Color: As approved by Owner.

## SECTION 083113 - ACCESS DOORS AND FRAMES

## 1.1 SUMMARY

A. Access doors and frames for walls and ceilings.

#### 1.2 QUALITY ASSURANCE

- A. Fire-Rated Vertical Access Doors and Frames: NFPA 252 or UL 10B.
- B. Fire-Rated Horizontal Access Doors and Frames: ASTM E 119 or UL 263.

### 1.3 PRODUCTS

- A. Access Doors and Frames for Walls and Ceilings:
  - 1. Type:
    - a. Flush access doors and trimless frames.
  - 2. Material: Steel.
  - 3. Fire-Resistance Rating: As required.
  - 4. Latch: Cam latch operated by screwdriver with interior release.
  - 5. Lock: Cylinder where required for security.
  - 6. Size: Minimum 30 inch by 30 inch.

#### B. Finishes:

1. Steel: Primed finish.

## SECTION 083323 - OVERHEAD COILING DOORS

#### 1.1 SUMMARY

- A. Electric-motor-operated overhead coiling doors:
  - 1. Insulated service doors.

### 1.2 PERFORMANCE REQUIREMENTS

- A. Wind Load: Comply with project requirements.
- B. Seismic Performance: SEI/ASCE 7, "Minimum Design Loads for Buildings and Other Structures."
- C. Operation: Door system that does not pose a safety or injury hazard during operations.

### 1.3 COMPONENTS

- A. Door Curtain: Aluminum.
  - 1. Slats: Flush.
  - 2. Insulation: Polystyrene or polyurethane foam.
  - 3. Endlocks.
  - 4. Curtain jamb guides.
- B. Hood: Same material as door curtain.
- C. Integral sills.
- D. Seals: Weather.
- E. Electric Door Operation: Operator type as recommended by manufacturer with remote-control station.
  - 1. Obstruction Detection Device: Self monitoring photoelectric.

### F. Finishes:

- 1. Aluminum: Powder-coat finish.
  - a. Color: As approved by Owner.

## SECTION 083326 - OVERHEAD COILING GRILLES

### 1.1 SUMMARY

A. Electric-motor-operated overhead coiling grilles:

### 1.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: SEI/ASCE 7, "Minimum Design Loads for Buildings and Other Structures."
- B. Operation: Door system that does not pose a safety or injury hazard during operations.

## 1.3 OPEN-CURTAIN GRILLE ASSEMBLY

- A. Aluminum overhead coiling grille with a curtain having a network of horizontal rods that interconnect with vertical links.
- B. Hood: Aluminum.
- C. Electric Door Operation: Operator type as recommended by manufacturer with keyed remote-control station.
  - 1. Obstruction Detection Device: Self monitoring photoelectric.
- D. Finish: Clear anodized.

## SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

#### 1.1 SUMMARY

- A. Exterior and interior storefront framing.
- B. Exterior and interior manual-swing entrance doors and door-frame units.

### 1.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Contractor to design aluminum-framed systems.
- B. Structural Performance:
  - 1. Wind Loads: Comply with project requirements.
  - 2. Seismic Loads: Comply with project requirements.
- C. Deflection of Framing Members:
  - 1. Deflection Normal to Wall Plane: Limited to L/175.
  - 2. Deflection Parallel to Glazing Plane: Limited to L/360 or 1/8 inch, whichever is smaller.

#### 1.3 QUALITY ASSURANCE

A. Accessibility Requirements: Provide installed hardware that complies with U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)," and ICC/ANSI A117.1.

#### 1.4 WARRANTY

- A. Materials and Workmanship: Two years.
- B. Finish: Two years.

#### 1.5 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer.
- B. Steel reinforcement where required.

#### 1.6 FRAMING SYSTEMS

- A. Framing Members: Manufacturer's standard extruded-aluminum framing members.
  - 1. Construction: Thermally broken.
  - 2. Glazing System: Retained mechanically with gaskets on four sides.
  - 3. Glazing Plane: Center.
- B. Brackets and reinforcements.
- C. Fasteners and accessories.
- D. Concrete and masonry inserts.
- E. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing.
- F. Framing system gaskets and sealants.

#### 1.7 GLAZING SYSTEMS

- A. Glazing: As specified in Division 08 Section "Glazing."
- B. Glazing gaskets.
- C. Spacers and setting blocks.

#### 1.8 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors:
  - 1. Door Construction: 1-3/4-inch overall thickness.
  - 2. Door Design: Medium stile.
  - 3. Glazing stops and gaskets.
- B. Entrance Door Hardware: As indicated.

#### 1.9 ALUMINUM FINISHES

- A. Aluminum Finishes: High-performance organic (two coats).
  - 1. Color: As approved by Owner.

### 1.10 DOOR HARDWARE SETS

A. Manufacturer's standard commercial quality hardware including:

- 1. Continuous gear hinges.
- 2. Thresholds.
- 3. Push/pull devices.
- 4. Locking devices.
- 5. Stops.
- 6. Weatherseals.
- B. Hardware specified in Division 8 Section "Door Hardware" includes:
  - 1. Cylinders.
  - 2. Closers.
  - 3. Exit devices.

## SECTION 087100 - DOOR HARDWARE

### 1.1 SUMMARY

- A. Commercial door hardware for swinging doors.
- B. Cylinders for doors specified in other Sections.
- C. Electrified door hardware.

#### 1.2 WARRANTY

A. Materials and Workmanship: Three years.

## 1.3 PRODUCTS

- A. Hinges:
  - 1. Exterior: Stainless steel.
  - 2. Interior: Steel.
  - 3. Fire-Rated Assemblies: Steel.
  - 4. Options: Nonremovable pins at outswinging locked doors.
- B. Mechanical Locks and Latches:
  - 1. Bored Locks: Grade 1, Series 4000.
- C. Auxiliary Locks and Latches: Grade 1.
  - 1. Push-Button Combination Locks: Grade 1 for cylindrical locks.
- D. Electromagnetic Locks: 1000-lbf strength ranking.
- E. Door Bolts:
  - 1. Automatic and Self-Latching Flush Bolts: Grade 1.
- F. Exit Devices: Grade 1.
  - 1. Panic exit devices.
  - 2. Fire exit devices.
  - 3. Removable mullions.
  - 4. Outside Trim: Match locksets and latchsets.
  - 5. Electronic exit bars.
- G. Cylinders and Keying:

DOOR HARDWARE 087100 - 1

- 1. Cylinders: Standard.
  - a. Grade 1.
  - b. Number of Pins: Six.
  - c. Cores: Interchangeable.
- 2. Construction Keying: Construction cores.
- 3. Keying System:
  - a. Key system to Owner's requirements including master, grand master, and great-grand master key as applicable.
  - b. Keys: Nickel silver.
- H. Key-Control System:
  - 1. Cabinet: Grade 1, multiple drawer, wall mounted.
- Electric Strikes: Grade 1.
- J. Operating Trim: Stainless steel.
- K. Closers:
  - 1. Surface: Grade 1.
  - 2. Coordinators.
- L. Protective Trim Units: Stainless steel.
- M. Stops and Holders:
  - 1. Stops and Bumpers: Grade 1.
  - 2. Electromagnetic door holders for fire door assemblies.
  - 3. Silencers for metal door frames.
- N. Door Gasketing: Perimeter, and meeting stile. Smoke labeled, fire labeled, and sound rated, as required.
- O. Thresholds.
- P. Miscellaneous Door Hardware: Boxed power supplies.
- Q. Finishes: Satin chrome.
- 1.4 FIELD QUALITY CONTROL
  - A. Independent Architectural Hardware Consultant: Contractor engaged to perform inspections.
  - B. Occupancy Adjustment: Six months.

DOOR HARDWARE 087100 - 2

- 1.5 DOOR HARDWARE SETS
  - A. Comply with Owner's requirements.

END OF SECTION 087100

DOOR HARDWARE 087100 - 3

### SECTION 087113 - AUTOMATIC DOOR OPERATORS

#### 1.1 SUMMARY

A. Low-energy, power-open door operators. Provide at locations as required by Owner.

#### 1.2 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100.
- B. UL Standard: Comply with UL 325.

#### 1.3 WARRANTY

- A. Special Warranty: Failure in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.

### 1.4 LOW-ENERGY, POWER-OPEN DOOR OPERATORS

- A. General: Provide operators of size recommended by manufacturer for door size, weight, and movement; for condition of exposure; and for long-term, maintenance-free operation under normal traffic load for type of occupancy indicated
- B. Standard: Comply with BHMA A156.19.
- C. Operation: Power opening and spring closing.
- D. Operating System: Electromechanical.
- E. Microprocessor Control Unit: Solid-state controls.
- F. Mounting: Surface.
- G. Wall Push-Plate Switch: Manufacturer's standard semiflush, wall-mounted or frame-mounted, door control switch.
- H. Cover Finish: Class II, Color Anodic Finish.

### SECTION 088000 - GLAZING

### 1.1 SUMMARY

- A. Glazing required for the following:
  - 1. Windows.
  - Doors.
  - 3. Glazed entrances.
  - 4. Interior borrowed lites.
  - 5. Storefront framing.

#### 1.2 WARRANTY

- A. Deterioration of Coated Glass: Not less than 10 years.
- B. Deterioration of Laminated Glass: Not less than five years.
- C. Deterioration of Insulating Glass: Not less than 10 years.

#### 1.3 MATERIALS

- A. Glass Products:
  - 1. Annealed Float Glass: Clear and tinted.
  - 2. Heat-Treated Float Glass: Clear and tinted. Heat strengthened and fully tempered.
  - 3. Coated Float Glass: Pyrolytically coated (low-E).
  - 4. Laminated Glass: With polyvinyl-butyral sheet interlayer.
  - 5. Insulating Glass: Manufacturer's standard dual-seal units.
- B. Fire-Resistive Glazing: Monolithic ceramic glazing material.
- C. Glazing Tapes: Expanded-cellular type.

### 1.4 GLASS UNITS

- A. Monolithic Float-Glass Units (interior openings):
  - 1. Clear. Safety glazing (fully tempered or laminated) at hazardous locations.

a. Thickness: 1/4 inch minimum.

GLAZING 088000 - 1

- B. Fire-Resistive Glazing:
  - At glazing required to be fire rated. Fire-resistive safety glazing at hazardous locations.
- C. Insulating-Glass Units (exterior openings):
  - 1. Tinted, with low-E coating. Annealed or heat-strengthened as required. Safety glazing (fully tempered or laminated) at hazardous locations.
    - a. Lite thickness: 1/4 inch minimum.
    - b. Overall thickness: 1 inch.
    - c. Color and performance characteristics: As approved by Owner.

END OF SECTION 088000

GLAZING 088000 - 2

## SECTION 089000 - LOUVERS AND VENTS

## 1.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Contractor to design louvers.
- B. Wind Loads: Comply with project requirements.

### 1.2 PRODUCTS

- A. Fixed, Extruded-Aluminum Louvers:
  - 1. Horizontal, Drainable-Blade Louver: 4 inches deep minimum with exposed mullions.
- B. Louver Screens:
  - 1. Provided at each exterior louver.
  - 2. Screening Type: Bird screening.
- C. Blank-Off Panels: Insulated.
- D. Finishes:
  - 1. Aluminum: Two-coat fluoropolymer.

## SECTION 092216 - NON-STRUCTURAL METAL FRAMING

#### 1.1 SUMMARY

A. Non-load-bearing steel framing members for interior framing and suspension systems.

#### 1.2 MATERIALS

- A. Suspension Systems:
  - 1. Wire hangers.
  - 2. Grid suspension systems for ceilings.
- B. Steel Framing for Framed Assemblies:
  - 1. Studs and runners:
    - a. Thickness: Minimum 25 gauge, but not less than required for height and application. Minimum 20 gauge at walls supporting ceramic tile.
    - b. Spacing: Maximum 24 inches o.c., except maximum 16 inches o.c. at walls supporting tile.
    - c. Width: Minimum 3-5/8 inches. Minimum 6 inches at walls supporting ceramic tile.
  - 2. Slip-Type Head Joints:
    - a. Single long-leg runner.
    - b. Double runner.
    - c. Deflection track.
    - d. Use where walls extend to structure above.
  - 3. Firestop track at fire rated walls.
  - 4. Hat-shaped, rigid furring channels where required.
  - 5. Resilient furring channels as required for sound ratings.

### SECTION 092900 - GYPSUM BOARD

#### 1.1 SUMMARY

A. Interior gypsum board.

### 1.2 QUALITY ASSURANCE

- A. Mockups for the following:
  - 1. Levels of gypsum board finish for use in exposed locations.

### 1.3 MATERIALS

- A. Interior Gypsum Board:
  - 1. Type X.
- B. Minimum Thickness: 5/8 inch.
- C. Trim Accessories: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - Corner beads.
  - 2. U-bead, L-bead, LC-bead.
- D. Auxiliary Materials:
  - 1. Steel drill screws: ASTM C 1002, ASTM C 954
  - 2. Sound attenuation blankets: ASTM C 665, Type I.

## 1.4 INSTALLATION

- A. Gypsum Board Finish Levels:
  - 1. Level 1: Ceiling plenum areas, concealed areas
  - 2. Level 4: Surfaces to receive wallcoverings.
  - 3. Level 5: Painted surfaces receiving semi-gloss finish.

END OF SECTION 092900

GYPSUM BOARD 092900 - 1

### SECTION 093000 - TILING

#### 1.1 SUMMARY

- A. Ceramic mosaic, paver, and glazed wall tile.
- B. Stone thresholds installed as part of tile installations.
- C. Metal edge strips installed as part of tile installations.

### 1.2 QUALITY ASSURANCE

A. Mockups for each form of construction.

### 1.3 MATERIALS

- A. Glazed Wall Tile Trim Shapes: Coved base, bullnose cap, bullnose external corner.
- B. Thresholds: Granite.
- C. Crack Isolation Membrane: Chlorinated polyethylene sheet.
- D. Metal Edge Strips: Stainless steel.
- E. Grout Sealer.

### 1.4 FLOOR TILE INSTALLATION SCHEDULE

- A. Interior Floors on Concrete Slabs on Grade TCNA F125A: Thinset mortar over crack isolation membrane.
  - 1. Tile Type: Unglazed ceramic mosaic
    - a. Size: 2 inches by 2 inches.
    - b. Color: As approved by Owner.
  - 2. Tile Type: Glazed and unglazed paver (porcelain) tile.
    - a. Size: 12 inches by 12 inches.
    - b. Color: As approved by Owner.
  - 3. Mortar: Latex- portland cement mortar bond coat.
  - 4. Grout: Polymer-modified sanded grout. Sealed.

TILING 093000 - 1

## 1.5 WALL TILE INSTALLATION SCHEDULE

- A. Interior Walls over Metal Studs TCNA W244: Thinset mortar bed on cementitious backer units.
  - 1. Tile Type: Glazed wall tile.
    - a. Size: 6 inches by 6 inches for wall tile and base.
    - b. Color: As approved by Owner.
  - 2. Mortar: Latex- portland cement mortar bond coat.
  - 3. Grout: Polymer-modified unsanded grout. Sealed.

END OF SECTION 093000

TILING 093000 - 2

## SECTION 095113 - ACOUSTICAL PANEL CEILINGS

### 1.1 SUMMARY

A. Acoustical panels and exposed suspension systems.

### 1.2 QUALITY ASSURANCE

- A. Acoustical Panel Quality Standard: ASTM E 1264.
- B. Metal Suspension System Quality Standard: ASTM C 635.

#### 1.3 MATERIALS

- A. Acoustical Ceiling Panels:
  - 1. Size: 24 by 48 inches.
  - 2. Thickness: 5/8 inch.
  - 3. Type: Non-directional perforated and fissured. Water-felted.
- B. Metal Suspension Systems:
  - 1. Wire hangers, braces, and ties.
  - 2. Seismic perimeter stabilizer bars, struts, and clips.
  - 3. Wide-Face, Capped, Double-Web Steel: Heavy duty.
- C. Metal Edge Moldings and Trim: Roll-formed sheet metal.
- D. Acoustical sealants at perimeter wall angles.

### 1.4 INSTALLATION

A. Installation: ASTM C 636, ASCE/SEI 7 (Section 9.6).

## SECTION 096513 - RESILIENT BASE AND ACCESSORIES

## 1.1 PRODUCTS

### A. Resilient Base:

- 1. Material Requirement: Rubber.
- 2. Style: Cove.
- 3. Minimum Thickness: 0.125 inch.
- 4. Height: 4 inches.
- 5. Outside Corners: Job formed.
- 6. Inside Corners: Job formed.

## B. Resilient Molding Accessory: Rubber.

- 1. Nosing for carpet.
- 2. Nosing for resilient floor covering.
- 3. Reducer strip for resilient floor covering.
- 4. Joiner for tile and carpet.
- 5. Transition strips.

### C. Installation Materials:

- 1. Trowelable leveling and patching compounds.
- 2. Adhesives.
- 3. Metal edge strips.

## SECTION 096519 - RESILIENT TILE FLOORING

## 1.1 PRODUCTS

- A. Vinyl Composition Floor Tile:
  - 1. Class: Through pattern.
  - 2. Wearing Surface: Smooth.
  - 3. Thickness: 0.125 inch.
  - 4. Size: 12 by 12 inches.
  - 5. Color: As selected by Owner.
- B. Installation Materials:
  - 1. Trowelable leveling and patching compounds.
  - 2. Adhesives.

## 1.2 FLOOR TILE INSTALLATION

A. Lay tiles square with room axis.

# SECTION 096816 - SHEET CARPETING (STATE CARPET CONTRACT)

### 1.1 WARRANTY

A. Performance: Lifetime

B. Stain: 10 years.

### 1.2 MATERIALS

# A. Tufted Carpet:

- 1. Product: Shaw; Hit the Books (State Carpet Contract), or equivalent as approved by Owner.
- 2. Fiber Content: 100 percent nylon 6, 6.
- 3. Pile Characteristic: Level-loop pile.
- 4. Density: 7333 oz./cu. yd.
- 5. Pile Thickness: 0.108 inches.
- 6. Tufted Weight: 22 oz./sq. yd..
- 7. Backing: High-performance polyurethane laminated to a woven secondary backing.
- 8. Color: As approved by Owner.

### 1.3 INSTALLATION

A. Installation Method: Direct glue down.

## **SECTION 099113 - EXTERIOR PAINTING**

## 1.1 SUMMARY

A. Surface preparation and the application of paint systems on exterior substrates.

## 1.2 QUALITY ASSURANCE

A. Quality Standards: "MPI Approved Products List" and "MPI Architectural Painting Specification Manual."

### 1.3 EXTERIOR PAINTING SCHEDULE

- A. Galvanized-Metal Substrates:
  - 1. Latex System: MPI EXT 5.3A.
- B. Colors: As approved by Owner.

#### SECTION 099123 - INTERIOR PAINTING

#### 1.1 SUMMARY

A. Surface preparation and the application of paint systems on interior substrates.

#### 1.2 QUALITY ASSURANCE

A. Quality Standards: "MPI Approved Products List" and "MPI Architectural Painting Specification Manual."

#### 1.3 FIELD QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:
  - 1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
  - 2. Testing agency will perform tests for compliance with product requirements.
  - 3. Owner reserves the right to review invoices and delivery records for quantity and quality of paint used.

### 1.4 INTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Painted Traffic Surfaces:
  - 1. Latex Floor Enamel System: MPI INT 3.2A.
- B. Steel Substrates:
  - 1. Latex System: MPI INT 5.1Q.
- C. Galvanized-Metal Substrates:
  - 1. Latex System: MPI INT 5.3A.
- D. Gypsum Board Substrates:
  - Latex System: MPI INT 9.2A.
- E. Colors: As approved by Owner.

### END OF SECTION 099123

INTERIOR PAINTING 099123 - 1

## SECTION 101100 - VISUAL DISPLAY SURFACES

#### 1.1 SUMMARY

- A. Visual Display Surfaces:
  - 1. Markerboards.
  - 2. Tackboards.
  - 3. Display rails.
  - 4. Support systems for visual display boards.
  - 5. Tack assemblies for direct application to wall surface.

#### 1.2 WARRANTY

A. Materials and Workmanship for Porcelain-Enamel Face Sheets: Life of building.

#### 1.3 MATERIALS

- A. Porcelain-Enamel Face Sheet: Manufacturer's standard steel.
- B. Markerboard Assemblies: Porcelain enamel.
- C. Tack Assemblies: Vinyl-fabric faced.
- D. Support System for Visual Display Boards: As recommended by manufacturer.
- E. Tack Assemblies for Direct Application: Vinyl-fabric-faced tack assembly.
- F. Markerboard Accessories:
  - 1. Aluminum frames.
  - 2. Trim: Factory-applied aluminum.
  - 3. Chalktray: Box type.
  - 4. Map rail with display rail, map hooks.
- G. Aluminum Finishes: Class II, color anodic.

# 1.4 FABRICATION

A. Visual Display Boards: Factory assembled.

#### SECTION 101400 - SIGNAGE

- 1.1 SUMMARY
  - A. Dimensional characters.
  - B. Panel signs.

#### 1.2 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with applicable provisions in ADA Accessibility Guidelines and ICC/ANSI A117.1.

#### 1.3 PRODUCTS

- A. Dimensional Characters:
  - 1. Cast Characters: 12 inch high aluminum with concealed stud mounting.
- B. Panel Signs:
  - 1. Interior Panel Signs:
    - a. Material: Acrylic sheet.
    - b. Raised copy: Machine-cut acrylic characters.
    - c. Panel Sign Frames: PVC or metal.
    - d. Changeable Message Inserts: Transparent covers with paper inserts printed by Owner.
    - e. Braille: Grade 2

#### 1.4 FINISHES

- A. Aluminum: Class I, clear anodized.
- B. Acrylic Sheet: Copy and background colors that are UV and water resistant.
  - 1. Colors: As approved by Owner.

#### 1.5 INSTALLATION

- A. Dimensional Characters: Manufacturer's standard flush mounting.
- B. Wall-Mounted Signs: Two-face tape.

# **END OF SECTION 101400**

SIGNAGE 101400 - 1

#### SECTION 101426 - POST AND PANEL SIGNAGE

#### 1.1 SUMMARY

A. Nonilluminated Internally illuminated post and panel signs.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. Wind Loads: Comply with project requirements.
- B. Seismic Performance: ASCE/SEI 7

#### 1.3 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with applicable provisions in ADA-Accessibility Guidelines and ICC A117.1.

#### 1.4 WARRANTY

A. Materials and Workmanship: Five years.

#### 1.5 PRODUCTS

- A. Panel Signs:
  - 1. Message Panel Sign Materials: Aluminum sheet.
    - a. Edge Condition: Square cut.
    - b. Corner Condition: Rounded.
    - c. Color and Content: Comply with Owner's requirements.
    - d. Thickness: 1/8 inch minimum.
- B. Posts: Fabricated for direct-burial mounting.
  - 1. Aluminum: Square.

# 1.6 FINISHES

A. Aluminum: Baked enamel.

# 1.7 INSTALLATION

A. Posts: Embedded in concrete.

# **SECTION 102113 - TOILET COMPARTMENTS**

# 1.1 SUMMARY

- A. Steel baked enamel units as follows:
  - 1. Toilet Enclosures: Overhead braced.
  - 2. Urinal Screens: Wall hung.

#### 1.2 COMPONENTS

- A. Brackets (Fittings):
  - 1. Stirrup Type: Chrome-plated, nonferrous, cast zinc alloy (zamac) or clear anodized aluminum.
- B. Hardware and Accessories: Chrome-plated, nonferrous, cast zinc alloy (zamac) or clear anodized aluminum.
- C. Mounting: Mounted to reinforced wall plates for support

#### SECTION 102226 - OPERABLE PARTITIONS

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Manually operated, paired acoustical panel partitions.

# 1.2 PERFORMANCE REQUIREMENTS

A. Seismic Performance: ASCE/SEI 7, "Minimum Design Loads for Buildings and Other Structures."

#### 1.3 QUALITY ASSURANCE

A. Flame-Spread Index: 25 or less.

## 1.4 MATERIALS

- A. Frame: Steel.
- B. Face/Liner Sheets: Steel sheet with gypsum board.

#### 1.5 OPERABLE ACOUSTICAL PANELS

- A. Panel Width: Standard widths.
- B. STC: Not less than 50.
- C. Panel Weight: 8 lb/sq. ft. maximum.
- D. Panel Thickness: Not less than 3 inches.
- E. Hardware: Concealed hinges.
- F. Finish Facing: Vinyl-coated fabric wall covering.

#### 1.6 ACCESSORIES

A. Pass Doors.

# SECTION 102800 - TOILET ACCESSORIES

#### 1.1 SUMMARY

#### A. Public-Use Washroom Accessories:

- 1. Toilet tissue dispensers.
- 2. Paper towel dispensers.
- 3. Waste receptacle.
- 4. Liquid-soap dispensers.
- 5. Sanitary napkin and tampon dispensers.
- 6. Toilet seat cover dispensers.
- 7. Grab bars.
- 8. Sanitary-napkin disposal units.
- 9. Shelf units.
- 10. Framed mirror unit (stainless steel frame).
- 11. Material: Stainless steel.

# B. Childcare Accessories:

- 1. Diaper-changing station.
- 2. Material: High-density polyethylene.
- C. Underlavatory guards.
  - 1. Material: Molded plastic.
- D. Custodial Accessories:
  - 1. Utility shelf.
  - 2. Mop and broom holder.
  - 3. Material: Stainless steel.

# 1.2 WARRANTY

A. Silver Spoilage for Mirrors: 15 years.

# SECTION 104413 - FIRE EXTINGUISHER CABINETS

# 1.1 PRODUCTS

#### A. Fire Protection Cabinet:

- 1. Type: For fire extinguisher.
- 2. Construction: Nonrated. Fire rated where required.
- 3. Mounting: Semirecessed with rolled edge.
- 4. Door Style: Fully glazed panel with frame.
- 5. Door Glazing: Acrylic sheet.
- 6. Accessories: Door locks with safety release.
- 7. Finish: Steel, baked enamel or powder coated.

# SECTION 104416 - FIRE EXTINGUISHERS

- 1.1 QUALITY ASSURANCE
  - A. Fire Extinguishers: NFPA 10.
- 1.2 PRODUCTS
  - A. Portable, Hand-Carried Fire Extinguishers:
    - 1. Multipurpose dry-chemical type, steel container.
      - a. Rating: Minimum 4A-60BC, 10 lb.
      - b. Finish: Baked enamel.

# SECTION 105113 - METAL LOCKERS

# 1.1 PRODUCTS

- A. Knocked-Down, Standard Metal Lockers:
  - 1. Arrangement: Double tier.
  - 2. Material: Cold-rolled steel sheet.
  - 3. Body: 24 gauge steel sheet.
  - 4. Door: 16 gauge steel sheet.
  - 5. Door Style: Louvered vents top and bottom.
  - 6. Hinges: Knuckle.
  - 7. Door Handle and Latch: Projecting, multipoint latch, padlock hasp.
  - 8. Equipment: Hooks (1 double, 3 single for each locker).
  - 9. Accessories: Filler panels, finished end panels, number plates.
  - 10. Finish: Baked enamel or powder coat.
    - a. Color: As approved by Owner.

**END OF SECTION 105113** 

METAL LOCKERS 105113 - 1

# SECTION 107500 - FLAGPOLES

# 1.1 PERFORMANCE REQUIREMENTS

- A. Wind Loads: Comply with project requirements.
- B. Engineering design of flagpole by manufacturer.

# 1.2 PRODUCTS

- A. Flagpoles:
  - 1. Exposed Height: 30 feet.
  - 2. Aluminum Flagpoles: Cone tapered, with clear anodized finish.
    - a. Color: As approved by Owner.
- B. Mounting Type:
  - 1. Foundation tube.
- C. Fittings:
  - 1. Finial: Ball.
  - 2. Halyard: Internal.

**END OF SECTION 107500** 

FLAGPOLES 107500 - 1

# SECTION 111300 - LOADING DOCK EQUIPMENT

# 1.1 PRODUCTS

- A. Dock Lifts: MH 29.1.
  - 1. Rated Capacity: 5,000 lb.
  - 2. Platform Surface: Nonskid, safety-tread deck plate.
  - 3. Platform Size: 6 by 8 ft.
  - 4. Handrails: Removable, with safety chains at open ends.
  - 5. Bridge Material: Nonskid, safety-tread steel plate.
  - 6. Bridge Locations: Ends.
  - 7. Vertical Travel: 58 inches.
  - 8. Travel Speed: 12 ft./min.
  - 9. Operation: Hydraulic.
  - 10. Mounting: Pit.
  - 11. Finish: Painted.

# SECTION 115213 - PROJECTION SCREENS

# 1.1 MATERIALS

- A. Manually Operated Projection Screens:
  - 1. Bracket-mounted or ceiling-suspended, metal-encased screens.
- B. Front-Projection Screen Material: Matte-white viewing surface.
  - 1. Size: 84 by 84 inches.

# SECTION 115216 - PROJECTOR MOUNTS

# 1.1 SUMMARY

A. Fixed, structure mounted video projector mounts.

#### 1.2 PRODUCTS

- A. Projector Mount: Steel assembly with tilt, leveling, and 360 deg. rotation. Compatible with Owner's equipment.
  - 1. Finish: Provide manufacturer's standard finish.
    - a. Color: As approved by Owner.
- B. Mounting Accessories: Provide manufacturer's standard anchors, fasteners, framing, and bracing necessary for a complete installation.
- C. INSTALLATION
- D. Install mounts in compliance with audio visual equipment mount manufacturer's installation instructions.

# SECTION 118226 - WASTE COMPACTORS AND DESTRUCTORS

# 1.1 QUALITY ASSURANCE

- A. Waste Compactor Standards: ANSI Z245.2 and NFPA 82.
- B. Waste Bin and Hopper Standard: ANSI Z245.30.

#### 1.2 PRODUCTS

- A. Self-Contained Horizontal Compactors:
  - 1. Minimum WASTEC Rating Base Size: 0.75 cu. yd.
  - 2. Normal Cycle Time: 40 seconds.
  - 3. Motor Size: 5 hp. Minimum.
  - 4. Controls: Panel mounted jog controls, safety retract start, oil sight gauge with thermometer, remote control station with 10 ft. cable and keylock panel, full load indicator light with auto shut-off.
  - 5. Confirm requirements with Campus.

#### 1.3 DEMONSTRATION

A. Factory-authorized representative to train Campus's maintenance personnel.

# SECTION 122113 - HORIZONTAL LOUVER BLINDS

# 1.1 SUMMARY

A. Horizontal louver blinds with aluminum slats.

# 1.2 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: Passes NFPA 701.

# 1.3 PRODUCTS

- A. Horizontal Louver Blinds, Aluminum Slats:
  - 1. Nominal Slat Width: 1 inch.
  - 2. Tilt Control: Manual with wand.
  - 3. Lift Operation: Manual with cord.
  - 4. Valance.

#### 1.4 INSTALLATION

A. Mounting: Method as required for specific condition.

# DFCM PROJECT NO. 07037550

# SECTION 129300 - SITE FURNISHINGS

# 1.1 SUMMARY

- A. Bike racks.
- B. Benches.
- C. Waste receptacles.
- D. Ash urns.

# 1.2 PRODUCTS

- A. Bike Racks: One-piece seamless steel pipe serpentine type with 7 bike capacity.
- B. Benches: Seamless steel pipe frame with metal or plastic wood slat seat. Natural wood not allowed.
- C. Waist Receptacles: Pre-cast concrete housing with standard galvanized trash receptacle.
- D. Ash Urns: Stainless steel housing with stainless steel ash urn.

#### 1.3 FINISHES

- A. Provide manufacturers standard U.V. resistant, polyester powder coat finish system.
  - 1. Color: As approved by Owner.

END OF SECTION 129300

SITE FURNISHINGS 129300 - 1

#### SECTION 328400 - IRRIGATION SYSTEMS

#### 1.1 SUMMARY

A. Piping, valves, sprinklers, specialties, controls, and wiring for automatic-control irrigation system.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. Minimum Working-Pressure Ratings:
  - 1. Irrigation Main Piping: 200 psig.
  - 2. Circuit Piping: 150 psig.
  - 3. Drain Piping: 100 psig.

#### 1.3 MATERIALS

- A. Control-Valve Boxes: Plastic.
- B. Piping Specialties: Water regulators, water hammer arresters, and pressure gages.
- C. Sprinklers:
  - 1. Flush surface.
  - 2. Bubbler.
  - 3. Shrubbery.
  - 4. Pop-up spray.
  - 5. Pop-up, rotary spray.
  - 6. Pop-up, rotary impact.
- D. Sprinkler Specialties: Pressure gages, application pressure regulators, strainer/filter units, emitters, and drip tubes.
- E. Automatic-Control System: 24-V ac; with interior control enclosures, transformer, controller stations for automatic control valves, timing device, and wiring.

# 1.4 INSTALLATION

- A. Underground Irrigation Main Piping Applications:
  - 1. NPS 4 and Smaller: Schedule 40 PVC pipe.
  - 2. NPS 5 and Larger: Schedule 40 PVC pipe.
- B. Circuit Piping Applications:
  - 1. NPS 2 and Smaller: Schedule 40 PVC pipe.

- 2. NPS 2-1/2 to NPS 4: Class 40 PVC pipe.
- C. Underground Branch and Offset Piping Applications:
  - 1. NPS 2 and Smaller: Schedule 40 PVC pipe.
  - 2. NPS 2-1/2 to NPS 4: Class 200 PVC pipe.
- D. Risers to Aboveground Sprinklers and Specialties: Schedule 80 PVC pipe.
- E. Drain Piping Applications: Schedule 80 PVC pipe.
- F. Valve Applications:
  - 1. Underground, Shutoff-Duty Valves: Gate valve.
  - 2. Underground, Manual Control Valves: Bronze globe valve.
  - 3. Control Valves: Plastic diaphragm valve.
  - 4. Drain Valves: Bronze ball valve.

# SECTION 329200 - LAWNS AND GRASSES

# 1.1 SUMMARY

A. Sodded lawns.

# 1.2 QUALITY ASSURANCES

A. Topsoil analysis of existing and imported topsoil.

# 1.3 MAINTENANCE SERVICE

- A. Lawns: 30 days.
- B. Meadows: 40 days.

# 1.4 MATERIALS

- A. Turfgrass Sod: Kentucky Blue Grass.
- B. Topsoil: Import topsoil or manufacture topsoil off site.
- C. Organic Soil Amendments: Minimum 4%.
- D. Fertilizers: Commercial slow-release fertilizer.
- E. Planting Soil Mix: Topsoil with organic soil amendments.

### 1.5 INSTALLATION

A. Planting Soil Mix Depth for Newly Graded Subgrades: 4 inches.

# SECTION 329300 - EXTERIOR PLANTS

#### 1.1 SUMMARY

- A. Layout, soil preparation, bed establishment, excavation for and planting of trees, shrubs, ground covers and plants.
- B. Edgings.
- C. Planters.

#### 1.2 QUALITY ASSURANCE

A. Topsoil analysis of existing and imported topsoil.

#### 1.3 WARRANTY

- A. Trees and Shrubs: One year.
- B. Ground Cover and Plants: Three months.

#### 1.4 MAINTENANCE SERVICE

- A. Trees and Shrubs: Until acceptance.
- B. Ground Cover and Plants: Until acceptance.

#### 1.5 MATERIALS

- A. Shade and Flowering Trees: ANSI Z60.1, nursery grown.
  - 1. Shade Trees: Balled and burlapped.
  - 2. Small Trees: Balled and burlapped.
- B. Deciduous Shrubs: ANSI Z60.1, nursery grown; container grown.
- C. Coniferous Evergreens: ANSI Z60.1, nursery grown, normal quality; balled and burlapped and container grown.
- D. Broadleaf Evergreens: ANSI Z60.1, nursery grown, normal quality; balled and burlapped and container grown.
- E. Ground Cover Plants: ANSI Z60.1, nursery grown; container grown.
- F. Plants: ANSI Z60.1, nursery-grown annuals, perennials and fast-growing vines.

EXTERIOR PLANTS 329300 - 1

- G. Topsoil: Import topsoil or manufacture topsoil off site, amended to 4% organic matter, minimum.
- H. Fertilizers: Commercial fertilizer and slow-release fertilizer.
- I. Mulches: Organic.
- J. Landscape Edgings.
- K. Planting soil mix includes topsoil with organic soil amendments.

# 1.6 INSTALLATION

A. Planting Soil Mix Depth for Planting Beds: 12 inches.

END OF SECTION 329300

EXTERIOR PLANTS 329300 - 2

# **SECTION III - APPENDIX C**

This Appendix contains a Geotechnical Survey provided by the owner as general information for bidders.

# Geotechnical Engineering Study

Driver License Division and Department of Motor Vehicles Joint Facility
Proposed Building & Parking Lot
Draper, Utah

Prepared for:

Division of Facilities and Construction Management Salt Lake City, Utah



June 8, 2007

Mr. Dave McKay State of Utah Division of Facilities and Construction Management 4110 State Office Building Salt Lake City, UT 84114

RE: Geotechnical Engineering Study

Driver License Division and Department of Motor Vehicles Joint Facility

Draper, Utah

Dear Mr. McKay:

This report presents our geotechnical findings for the proposed building on the Minuteman Drive frontage road south of the recently completed State Liquor Store in Draper, Utah at 14445 South Minuteman Drive. The location of the site and proposed building location is shown on Figures 1 and 2, respectively. The objectives of this study were to define subsurface soil and groundwater conditions and then prepare recommendations regarding site grading and foundations. A summary of our findings include:

- The site soils can adequately support the structure using conventional spread footings using a recommended bearing capacity of 2,000 psf.
- Native soil consisted of the following typical sequence: poorly graded sand overlaying a sand and gravel mixture. The depth to the sand and gavel layer varies from 3 to 20 feet in the boreholes, depending on location.

If you have questions regarding this report or desire additional information, please contact me at (801) 521-8564, ext. 111.

Sincerely,
HARRIS & ASSOCIATES

Todd Touchard, P.E. Civil Engineer

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#### 1.0 INTRODUCTION

This report presents our findings for the proposed Driver License Division and Department of Motor Vehicles Joint Facility building located south of the State Liquor Store on 14445 South Minuteman Drive Minute Man Drive in Draper, Utah. The location of the site and proposed building locations are shown on **Figures 1 and 2**, respectively. The objectives of this study were to define subsurface soil and groundwater conditions then give recommendations regarding site grading, foundation, and pavements.

To accomplish the objectives, a field investigation program and laboratory analysis of soil was conducted. The field investigation included ten boreholes using a hollow stem auger drill rig. Borehole locations are presented in **Figure 2**. The borehole logs are shown in **Figures 3A to 3D**. A legend to log symbols and additional soil information is provided in **Figure 4**. A laboratory summary of tests is shown in **Figures 5A to 5B**.

If the proposed structure, location of structures, or proposed use of pavements changes, our office shall be notified to review and potentially change recommendations contained in this report.

#### 2.0 PROPOSED CONSTRUCTION

The proposed construction consists of a single story building using standard masonry walls, concrete footings, and steel roof construction. Anticipated loads are 2 to 4 kips per linear foot for continuous walls. Site grading is expected to create a level building pad. The building is expected to be set back from the top and toe of slopes as per IBC 2006 Building Code requirements.

#### 3.0 FIELD AND LABORATORY INVESTIGATION

#### 3.1 Field Investigation

To define the subsurface soil and groundwater conditions, we conducted four boreholes (BH-1 through BH-4) shown on **Figure 2**, in the Appendix. Boreholes were completed to required depth. Groundwater was not encountered in excavations.

The boreholes were located within the area of the proposed building and parking areas to best illustrate the general subsurface conditions. Soil samples were obtained from the boreholes at a minimum of five foot intervals. Soils were classified in the field and later verified with laboratory testing. The sampling was done in general accordance with ASTM D-420. The subsurface conditions disclosed by the field investigation are discussed in Section 4.0.

The descriptions of soil encountered in the excavations are presented in **Figures 3A to 3D** in the Appendix. Sampling information and other pertinent field data and observations are also included on the Borehole Logs. A Soil Classification Chart defining the terms and symbols used on the logs, is provided as **Figure 4** in the Appendix.

### 3.2 Laboratory Investigation

For soil classification and engineering properties, the samples obtained from exploratory borings were laboratory tested. The tests for the site included:

- Moisture Content
- Partial Sieve Analysis

Laboratory test data is shown on the individual Logs and is attached (Figure 5).

#### 4.0 SITE CONDITIONS

The site slopes steeply downward to the north and west. The site is vacant with access roads.

#### 4.1 Surficial Soils

The surficial soil consists of a brown silty sand with organics (Topsoil). These surface soils will exhibit very poor engineering properties. The depth of topsoil ranges from 4 to 6 inches thick.

#### 4.2 Subsoils

The subsoils at the site were found to be relatively consistent across the site. Beneath the surface topsoil, a loose sand with some gravel was observed. Beneath this layer, a sand and gravel mixture was observed to the full depth explored. The sand and gravel were relatively clean with trace silt soil particles.

#### 4.3 Groundwater

Groundwater was not encountered in any of the four boreholes.

#### **5.0 DESIGN RECOMMENDATIONS**

The following recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions. A technical design review should be made by this office if actual loads are greater than anticipated or if there is any change in project criteria, including building location on the site.

#### 5.1 Foundations

The following recommendations shall be followed for any conventional spot and continuous wall foundations used for the support of the structure at the subject site. An allowable **bearing capacity of 2.0 kips/ft²** may be used for foundation design, provided the following recommendations are observed:

- Foundations shall be placed on undisturbed native soil or properly compacted structural fill. The native soil is anticipated to be sand or gravel. If different soils are observed in footing excavation, our office is to be notified.
- Onsite soils shall be examined by a qualified inspector to verify that all topsoil, construction debris, soft spots, and any other deleterious materials have been removed prior to the placement of structural fill or footings.

- If granular fill is used to create a level building pad, it shall extend as a minimum one (1) foot past the edge of the footing for every one (1) foot of fill placed below the footing.
- Continuous footing width shall be maintained at a minimum of 12 inches.
- Spot footings shall be a minimum of 24 inches in width.
- Exterior footings shall be placed a minimum of 30 inches below final grade, and interior footing shall be placed a minimum of 16 inches below grade for frost protection.

#### 5.2 Estimated Settlement

Settlement is based on the contractor following the recommendations provided in this report. The anticipated total settlement of the foundation is not expected to exceed one (1) inch, assuming light to moderate loads. Differential settlement is not expected to exceed ½-inch. This is assuming the design recommendations are followed.

#### 5.3 Lateral Resistance and Earth Pressure

For the determination of lateral resistance for footings placed on a sand or gravel, a coefficient of friction value of 0.40 may be used for ultimate lateral resistance.

It is anticipated that the site will require earth retaining walls or slopes to accommodate the proposed construction. Due to the loose nature of the surface clean sands and gravels, we recommend not exceeding 2:1 (H:V) slope. Set-backs should be in conformance with the 2006 International Building Code Section 1805.3.

Lateral pressures will be dependent on slopes above retaining walls, height of walls, and type of soil used for backfill. The following lateral soil pressures are based on using native sand and gravel soil (135 pcf maximum density), no hydrostatic build-up behind the retaining wall, and a flat surface behind the wall:

Table 1. Lateral Earth Pressures

Height of Wall (ft)	Active (Yielding) (psf)	Moderate Yielding (psf)	At-rest (No Yielding) (psf)
10	81	162	243
15	121	243	365
20	162	324	486
25	202	405	608

(See notes next page)

#### Table 1 Notes:

- To use the Lateral Earth Pressures Table, first determine proposed wall height and then apply the pressure listed from chart to entire height of wall. Do not use pressures from other rows.
- 2. All pressures in Table 1 are given in uniform pressures of pounds per square foot (psf) based on height of wall.
- 3. Table 1 includes seismic pressures using a peak ground acceleration of 0.54g.
- 4. Full active pressures only develop when the wall is allowed to move a sufficient distance. For granular soil, the typical movement range is 0.001 to 0.004H, and a cohesive soil is 0.01 to 0.04H, where H is the height of the wall.

# 5.4 Site Soil Classification & Coefficient

The site is classified as "D", according to the International Building Code (IBC) 2006 Edition. Site coefficients provided by the USGS web page for 2006 IBC are provided in **Table 2** below.

**Table 2. Design Acceleration Coefficients** 

Design ac	celeration of	eleration for	1 second peri	od			
S <sub>s</sub>	Fa	S <sub>MS</sub>	S <sub>DS</sub>	S <sub>1</sub>	F <sub>v</sub>	S <sub>M1</sub>	S <sub>D1</sub>
1.371	1.0	1.371	0.914	0.581	1.5	0.872	0.581

#### 5.5 Liquefaction & Faults

Liquefaction of a soil is defined as the condition when saturated, loose, cohesion-less, (fine sand-type) soils have a sudden, large decrease in their ability to support. This is because of excessive pore water pressure, which develops during a seismic event. This site is considered to have a low potential for liquefaction.

The Wasatch fault, Salt Lake Section, is shown on the USGS Quaternary Folds Map (www.usgs.gov) to be located to the south and east of the site. Determining the exact location of the fault or a landslide study is beyond the scope of this report. Information provided by the USGS regarding the Wasatch fault is shown below:

**General:** The Wasatch fault zone is one of the longest and most tectonically active normal faults in North America. The fault zone shows abundant evidence of recurrent Holocene surface faulting and has been the subject of detailed studies for over three decades. Half of the estimated 50 to 120 post-Bonneville surface-faulting earthquakes in the Wasatch Front region have been on the Wasatch fault zone.

**Sections:** This fault has 10 sections. The nearly 350-km-long Wasatch fault zone has traditionally been divided into seismogenic segments that are thought to behave at least somewhat independently. We use the established model to document the sections described here. The southern eight sections are entirely in Utah. To the north, the Clarkston section straddles the State line between Idaho and Utah and the northernmost (Malad City) section is entirely in Idaho. The chronology of surface-faulting earthquakes on the fault is one of the better dated in the world and includes 16 earthquakes since 5.6 ka, with an average repeat time of 350 yr. Four of the central five sections [2351e-h] ruptured between 600 and 1,250 yr ago; whereas the next section to the north, Brigham City [2351d], has not ruptured in the past 2,125 yr. Slip rates of 1-2 mm/yr are typical for the central sections during Holocene time. In contrast, middle and late Quaternary (<150-250 ka) slip rates on these sections are about an order of magnitude lower. This suggests a causal relation between increased slip rates and isostatic rebound/crustal relaxation following deep lake cycles such as Bonneville.

# 5.6 Pavement Design

The following pavement designs are recommended.

Roadway Areas (medium to light truck traffic):

• Asphalt: 4-inches

Base: 12-inches roadbase

• Over: Native granular soil or properly prepared granular fill

#### Parking Areas:

• Asphalt: 3-inches

Base: 10-inches roadbase

Over: Native granular soil or properly prepared granular fill

Compaction should be done in 8-inch loose lifts and tested to 95% relative to laboratory maximum density (ASTM D1557). If the native soils are soft or if groundwater is encountered follow recommendation in **Section 5.8** below.

Native soils below the pavement section shall be moisture conditioned, vibratory compacted, then proof-rolled with heavy equipment to tighten any loose soil at the surface and identify soft spots before placing any portion of the pavement section. Proof rolling is to be verified by a Soils Special Inspector. If soft spots are encountered, they shall be addressed as per **Section 6.0** below.

#### 5.7 Concrete Slabs on Grade

Interior and exterior concrete slabs on grade should be placed over 4-inch minimum of ½-inch to 1-inch diameter poorly graded, clean, free-draining gravel. Below the 4-inch gravel layer shall be properly compacted granular fill or natural undisturbed native soil.

#### 5.8 Subgrade Stabilization

If construction practices, or weather conditions during the placement of the fill, caused the native fine grain soils to become soft in floor slab or footing areas, one of the following should be done:

- Remove areas where soils are disturbed and place an additional 18-inches of granular fill (crushed or pit-run gravel), gradation requirements are shown in **Section 6.4**, then place footings or begin placing subbase for pavements.
- Place geotextile grid between the undisturbed native soil and fill material to achieve proper compaction of the fill layers. Follow manufacturer's recommendations for lap length and installation. The manufacturer, type, and properties of the geotextile grid used shall be submitted to the geotechnical engineer for approval prior to construction.

If soft spots or disturbed soils are encountered, contact our office to verify the appropriate corrective action.

#### 6.0 GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

The guidelines outlined below address the geotechnically-related construction concerns for this project.

### 6.1 Foundation Excavations

Prior to placement of the foundations and floor sections, all areas that will support foundation loads or pavements should be inspected to insure that all loose, soft or otherwise undesirable material is removed and that the structures will bear on satisfactory material. All topsoil, fill and other deleterious materials underneath the proposed structure and pavement should be removed.

Harris & Associates, or an approved geotechnical engineer, must be contacted to inspect each excavation before the placement of piers, footings, or foundations.

If unsatisfactory material pockets are encountered in the excavation, the undesirable material should be removed and the elevation re-established by backfilling, which can be done with lean concrete or a properly compacted granular fill.

All foundation excavations should be protected against any detrimental change in condition such as disturbance, rain, and/or freezing. Surface runoff should be directed away from the excavation and not allowed to pond. If possible, all footing concrete should be poured the same day as the excavation is made. If this is not practical, the foundation excavation should be adequately protected and foundation placement should take place as soon as possible.

# 6.2 Final Grading & Surface Water

The ground surface should be sloped a minimum of 6 inches the first 10 feet (0.5%) from the building. Water should be directed away from footings. Surface water should not be directed towards any of the slopes of the project. A surface drainage plan is needed to prevent erosion or slope failures.

# 6.3 Soil Special Inspection, Fill Compaction & Installation

Soil Special Inspections are required for all fill placed greater than 12 inches. A Special Inspector shall provide the following inspections as outlined in the 2006 IBC:

- 1. Verify materials below footings are adequate to achieve design bearing capacity (periodic).
- 2. Verify excavations are extended to proper depth and have reached proper material (periodic).
- 3. Perform classification and testing of controlled fill materials (periodic).
- 4. Verify use of proper materials, densities, and lift thickness during placement and compaction of controlled fill (continuous).
- 5. Prior to placement of controlled fill, observe subgrade and verify site has been prepared properly (periodic).

All fill beneath load bearing areas should be compacted to at least 95% of the Modified Proctor maximum density (ASTM D 1557).

Compaction tests by a qualified testing agency should be taken on each lift to insure the required compaction is being achieved. The compaction should be accomplished by placing the fill in 8-inch loose lifts and mechanically compacting each lift to the specified minimum density. Field density tests should be performed on each lift as necessary to insure that compaction is being achieved.

Table 3. Recommended Minimum Frequency of Soil Testing During Construction.

Test Method	Minimum Frequency					
ASTM D 1557 Modified Moisture Density Relationship (proctor)	Start of project for each type of soil being compacted and when material appears to change in color or particle size distribution.					
ASTM D 422 Particle Size Analysis	Before import fill is delivered or used on the project and when the material appears to change.					
ASTM D 2922 Nuclear Density Compaction Testing	Every 100 linear feet of backfill, each lift, or one test per 800 s.f. area.					
ASTM D 2922 Nuclear Density Compaction Testing Roadways.	One test per 800 s.f. of roadway subbase and roadbase placed.					

#### 6.4 Granular Fill

Granular soils free of organics, debris, or other deleterious materials are recommended for use as granular fill at this site. Granular fill is defined as a well-graded sand and gravel material (pitrun or crushed gravel) with less than 15% passing the #200 sieve and no particles greater than 4 inches in maximum dimension. Granular fill should not exhibit plasticity characteristics. Approved soil types as defined using the Unified Soil Classification are considered to be GW, GP or GM, or combinations thereof. See **Figure 4** for soil type definitions. Granular fill to have a minimum CBR value of 60%. Contractor is to provide soil classification and sieve analysis submittal for final approval to Geotechnical Engineer.

#### 6.5 Road Base

For the base material directly below pavement, we recommend a granular soil free of organic or other deleterious material. We recommend a sand and fractured gravel material with between 5% and 12% passing the #200 sieve, and no particles greater than approximately ¾-inches in maximum dimension. Roadbase should have a minimum CBR value of 80%. Contractor is to provide soil classification and sieve analysis submittal for final approval to Geotechnical Engineer.

#### 7.0 LIMITATIONS

The recommendations provided herein were developed by evaluating the information obtained from the boreholes. The borehole data reflects the subsurface conditions only at the specific location at the particular time designated on the borehole log. Soil and ground water conditions may differ from conditions encountered at the actual borehole locations. The nature and extent of any variation in the borehole may not become evident until during the course of construction.

If variations do appear, it may become necessary to re-evaluate the recommendations of this report after we have observed the variation.

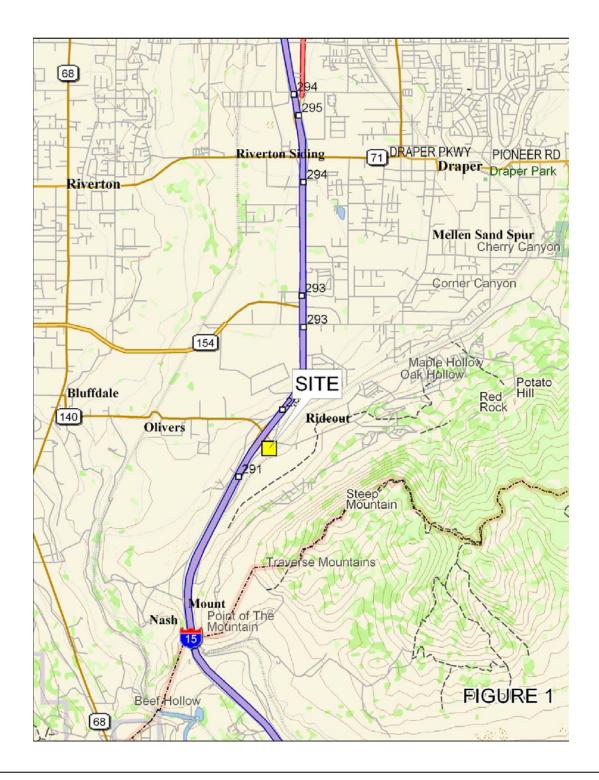
Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

# Appendices:

Figure 1 - Project Location Map

Figure 2 - Location Boreholes Site Map

Figure 3A-3D - Logs of Boreholes
Figure 4 - Soil Classification Chart
Laboratory Data Summary

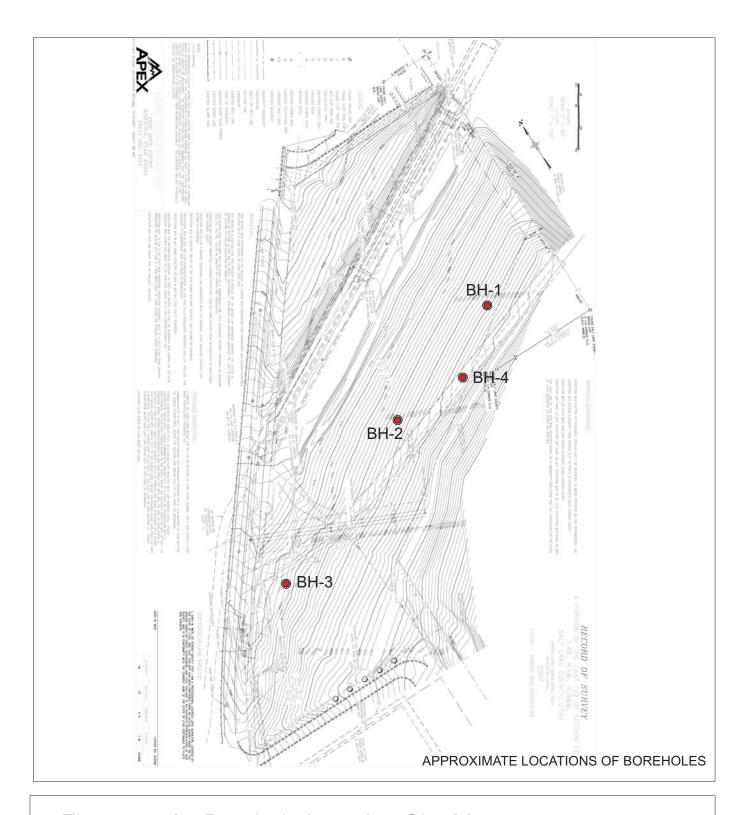


# DMV+DLD JOINT FACILITY - DRAPER, UT

DFCM NO. 07037550

# Figure 1 - Project Location Map





# Figure no.2 - Borehole Location Site Map DMV+DLD Joint Facility - Draper, Utah

DFCM No.07037550



Page: 1 of 1



Project Name: Draper DMV-DLD	Project No.:
Location:	Client: DFCM
Drilling Method: Hollow Stem Auger w/Cathead Rope Hammer	Date Drilled: 5/25/2007
Elevation: See Borehole Location Map	Water Level: None Encountered
Remarks:	

Graphical Log	Water Level	DESCRIPTION	DEPTH FT.	SAMPLE TYPE	BLOWS/6-inch	MOISTURE (%)	% PASSING #200	DRY DENSITY (PCF)	Liquid Limit (%)	Plastic Limit (%)	REMARKS
		Ground Surface	-0								
2		Topsoil (0 to 6") soft, dry, silt with some sand and clay, major root zone, brown  Sand with trace Silt and Gravel (6" to 20") SP medium to fine sand, trace coarse sand, fine and coarse gravel, brown, loose then medium dense below 10-feet.									
			-5 -	SPT	3,3,3	5	6				
			- - -10		12.16.22						
			_ _ _	SPT	12,16,22	4	5				
			- 15 - -	SPT	5,14,20	5	8				
		Sand and Gravel with trace Silt (20' to 31.5') SP/GP	- 20								* Sampler plugged
		fine to coarse gravel, medium to fine sand, dry, dense	_ _ _	SPT	23,21,73*	4	6				with a rock
			-25 -	SPT	20,22,26	9	6				
			- - -30	SPT	17,20,28						End of Sampling/Drilling
• 1			-  -	51 1	17,20,20						



Project Name: Draper DMV-DLD	Project No.:
Location:	Client: DFCM
Drilling Method: Hollow Stem Auger w/Cathead Rope Hammer	Date Drilled: 5/25/2007
Elevation: See Borehole Location Map	Water Level: None Encountered
Remarks	

Graphical Log	Water Level	DESCRIPTION	DEPTH FT.	SAMPLE TYPE	BLOWS/6-inch	MOISTURE (%)	% PASSING #200	DRY DENSITY (PCF)	Liquid Limit (%)	Plastic Limit (%)	REMARKS
~		Ground Surface  Topsoil (0 to 4") soft, dry, silt with some sand and clay, major root zone, brown  Sand with trace Silt and Gravel (4" to 15') SP medium to fine sand, trace coarse sand, fine and coarse gravel, medium dense, brown	- - -								
			_ 5 	SPT	6,8,8	3	5				-
			- - 10 -	SPT	9,9,14	4	6				
		Sand and Gravel with cobbles and trace Silt (15' to 16.5') SP/GP fine to coarse gravel, some cobbles to 4", medium to fine	- - 15	SPT	10,17,27	4	4				End of Sampling/Drilling
		sand, dry, dense, brown	- - - -20								
			_ _ _ _								





Project Name: Draper DMV-DLD	Project No.:
Location:	Client: DFCM
Drilling Method: Hollow Stem Auger w/Cathead Rope Hammer	Date Drilled: 5/25/2007
Elevation: See Borehole Location Map	Water Level: None Encountered
Remarks:	

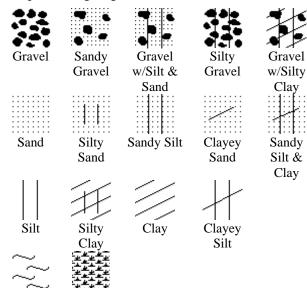
Graphical Log	Water Level	DESCRIPTION	DEPTH FT.	SAMPLE TYPE	BLOWS/6-inch	MOISTURE (%)	% PASSING #200	DRY DENSITY (PCF)	Liquid Limit (%)	Plastic Limit (%)	REMARKS
~		Ground Surface  Topsoil (0 to 4") soft, dry, silt with some san, major root zone, brown  Sand with trace Silt and Gravel (4" to 8.5') SP	-0								
		medium to fine sand, trace coarse sand, fine and coarse gravel, loose, brown	_	SPT	5,6,5	6	11				
			- -5								
			_								
			_	SPT	3,5,7	6	6				End of Sampling/Drilling
			- 10 -								
			_								
			- - 15								
			_								
			_								
			- 20 -								
			_								
			- - 25								



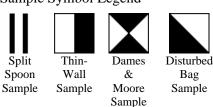
Project Name: Draper DMV-DLD	Project No.:
Location:	Client: DFCM
Drilling Method: Hollow Stem Auger w/Cathead Rope Hammer	Date Drilled: 5/25/2007
Elevation: See Borehole Location Map	Water Level: None Encountered
Remarks:	

Graphical Log	Water Level	DESCRIPTION	DEPTH FT.	SAMPLE TYPE	BLOWS/6-inch	MOISTURE (%)	% PASSING #200	DRY DENSITY (PCF)	Liquid Limit (%)	Plastic Limit (%)	REMARKS
		Topsoil (0 to 6") soft, dry, silt with some sand and clay, major root zone, brown  Sand with trace Silt and Gravel (6" to 3") SP medium to fine sand, trace coarse sand, fine and coarse gravel, medium dense, brown  Sand and Gravel with cobbles and trace Silt (3' to 16.5') SP/GP fine to coarse gravel, some cobbles to 4", medium to fine sand, dry, dense, brown  12' to 14' Dense Gravel Layer	-0 	SPT	20,26,34	3 5	5				End of Sampling/Drilling
			- -25								

#### Graphical Log Legend



#### Sample Symbol Legend



### Auger Sample

#### Moisture Content

Description	Field Test
Dry	Absence of moisture, dusty
Moisture	Damp but no visible water
Wet	Saturated, free water, typically
	below water table

Coarse Grain	1 S011	Fine Grain So	011
Modifiers		Modifiers	
Description	%	Description	%
Trace	< 15	Trace	< 5
Some	15 to 30	Some	5 to 12
Modifier (y)	30 to 40	Modifier (y)	12 to 40

#### Stratification

**Topsoil** 

Description	Thickness	Description	Thickness
Seam	1/16 "- 1/2"	Occasional	One or less per foot of thickness
Layer	½" to 12"	Frequent	More than one per foot of thickness

Apparent Density- Coarse Grain, Cohesionless

Apparent Density	SPT blows/ft	D&M blows/ft	Field Test
Very Loose	< 4	< 10	Easily penetrate w/1/2" reinforcing rod pushed by hand.
Loose	4 – 10	10 – 26	Difficult to penetrate rod pushed by hand.
Medium Density	10 – 30	26 – 72	Easily penetrate rod 1ft, driven w/5-lb hammer.
Dense	30 – 50	72 – 104	Difficult to penetrate rod 1ft, driven w/5-lb hammer.
Very Dense	> 50	> 104	Only able to penetrate rod couple inches, driven w/5-lb hammer.

Consistency-Fine Grain, Cohesive

Consist- ency	SPT blows/ft	D&M blows/ft	Field Test
Very Soft	< 2	< 2	Easily penetrated several inches by Thumb. Squeezes through fingers.
Soft	2 – 4	2-5	Easily penetrated 1 " by thumb. Molded by light finger pressure.
Medium Stiff	4 – 8	5 – 11	Penetrated over 1/2 " by thumb with moderate effort. Molded by strong finger pressure.
Stiff	8 – 15	11 – 22	Indented about 1/2 " by thumb but penetrated only with great effort.
Very Stiff	15 – 30	22 – 60	Readily indented by thumbnail
Hard	> 30	> 60	Indented with difficulty by thumbnail

- 1. In general, Unified Soil Classification Designations presented on the logs were evaluated by visual methods only. Therefore, actual designations (based on laboratory testing) may differ.
- 2. Lines separating strata on the logs represent approximate boundaries only Actual transitions may be gradual.
- 3. Logs represent general soil conditions observed at the point of exploration on the date indicated.
- 4. No warranty is provided as to the continuity of soil conditions between individual sample locations.

Soil Log Legend Figure 4



# SUMMARY OF LAB TEST DATA

HOLE	DEPTH	STANDARD				GRADATION	7	TORVANE				
/ON	BELOW	PENETRATION	DRY				% PASSING	SHEAR	•	ATTERBERG	<b>,</b>	TIOS
SAMPLE	GROUND	BLOWS	UNIT WEIGHT	MOISTURE	%	%	NO. 200	TONS/FT.2		LIMITS		CLASSIFICATION
NO.	SURFACE	PER FOOT	LB./FT.3	PERCENT	SAND	GRAVEL	SIEVE		L.L.	P.L.	Τd	UNIFIED SYSTEM
BH-1	5	9		5	91	3	9					SP
BH-1	10	38		4	72	23	8					SP
BH-1	15	34		5	68	3	8					SP
BH-1	20	44		4	51	43	9					SP-GP
BH-1	25	48		6	33	61	9					GP
BH-2	5	16		3	73	22	8					SP
BH-2	10	23		4	-	-	9					SP
BH-2	15	44		4	-	-	4					СР
BH-3	2	11		9	-	-	11					SP
BH-3	7	12		9	-	-	9					SP

Figure 5A DRAPER DMV-DLD

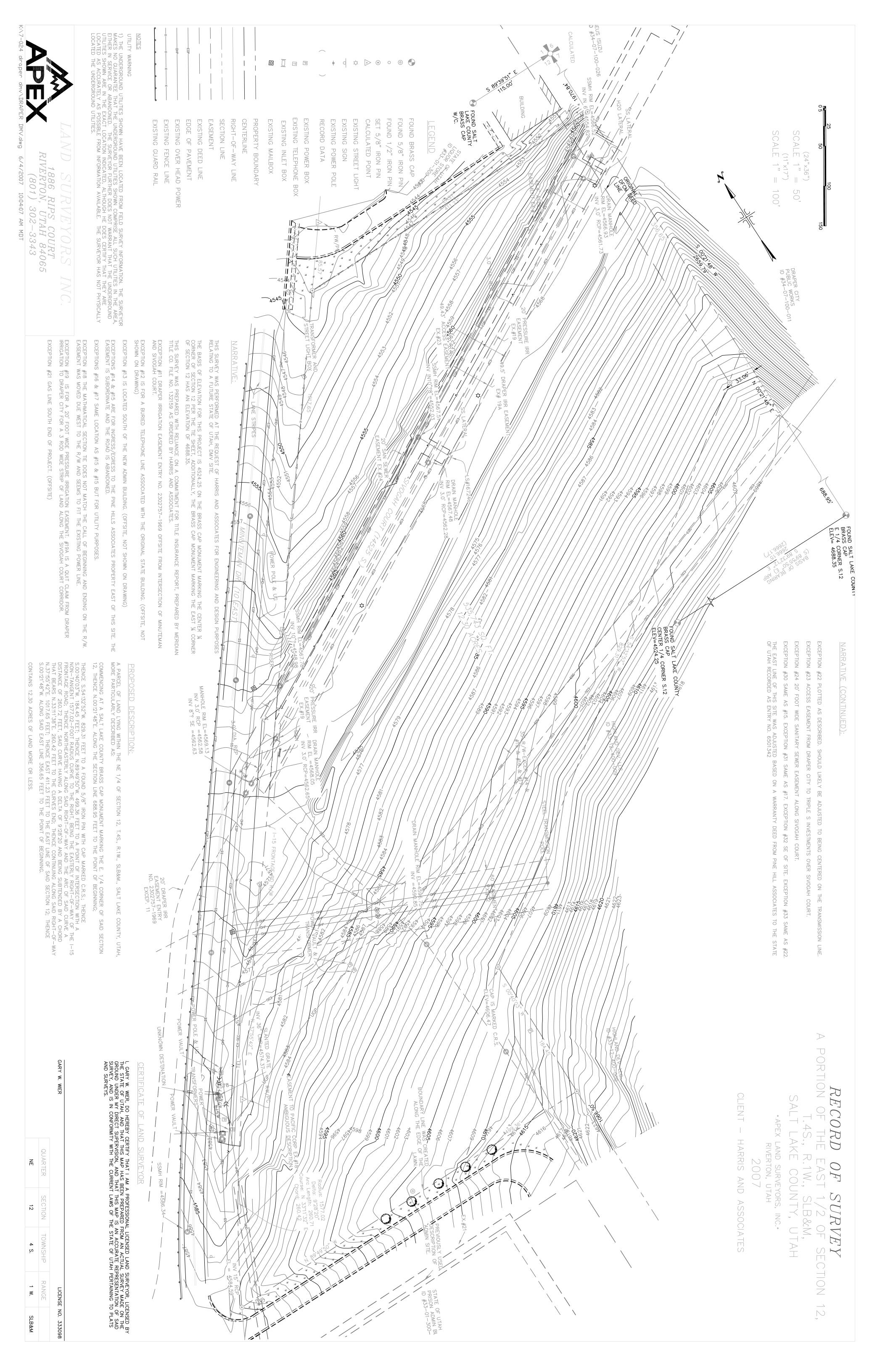




					1	1	1				
	SOIL	CLASSIFICATION	UNIFIED SYSTEM	d9-d8	ďĐ	d9-d8					
			P.I.								
	ATTERBERG	LIMITS	P.L.								
	1		L.L.								
TORVANE	SHEAR	TONS/FT.2									
	% PASSING	NO. 200	SIEVE	3	5	9					
GRADATION		%	GRAVEL	95	09	49					
		%	SAND	41	35	45					
		MOISTURE	PERCENT	2	3	5					
	DRY	UNIT WEIGHT	LB./FT.3								
STANDARD	PENETRATION	BLOWS	PER FOOT	37	09	28					
DЕРТН	BELOW	GROUND	SURFACE	5	10	15					
HOLE	NO./	SAMPLE	NO.	BH-4	BH-4	BH-4					

Figure 5B DRAPER DMV-DLD

## SECTION III - APPENDIX D This Appendix contains a Physical Survey of the site provided by the owner as general information for bidders.



## SECTION III - APPENDIX E

This Appendix contains DFCM Design Requirements.



#### **Division of Facilities Construction and Management**

## DESIGN REQUIREMENTS

May 25, 2005

#### **PREFACE**

In order for the Division of Facilities Construction and Management (DFCM) to be one of the nation's premier facility managers, it is essential that we consistently improve our performance. In order to do this, the Design Requirements provides a document and review process for consistently improving our processes and standards.

#### **DESIGN REQUIREMENTS**

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#### **DESIGN REQUIREMENTS**

#### 1.0 GENERAL

#### 1.1 General

A. These Design Requirements apply to all plans, processes, and procedures required for compliance with the Design Process.

#### 1.2 Procedure

- A. Complete the Design Requirement/Variance Form to make recommendations for additions, deletions, and changes to the Design Requirements.
- B. Complete the Design Requirement/Variance Form to request approval by the Director to vary from these Design Requirements based upon the specific project needs.
- C. All Design Requirement modifications require approval by the Director.
  - 1. If the Design Requirement is approved by the Director, then the DFCM's Designated Representative shall distribute the Design Requirements Procedure document to the appropriate project participants and shall file it in the project file.
  - 2. If the Design Requirement is approved by the Director and has general applicability to other projects, the Director shall arrange for the Design Requirement modification to be added to the appropriate document.
    - a. Verify with the DFCM person responsible for the specific professional discipline and the appropriate DFCM maintenance person that the proposed Design Requirement meets their requirements.

#### 1.3 Hierarchy of Requirements

- A. The hierarchy of requirements is as follows:
  - 1. Comply with the minimum requirements of all applicable laws, rules, and regulatory requirements.
    - a. Exceptions: Wherever there are practical difficulties involved in carrying out these provisions, the State Building Official with the approval of the Director of DFCM and/or the State Fire Marshall shall have authority to grant modifications. The modifications granted by the State Building Official shall be documented in this standard under the heading "Design Requirements."
  - 2. Comply with the consensus based ANSI standards for design, products, installation, and services unless the applicable laws, rules, and regulatory requirements are more stringent.

- 3. Comply with the "Performance Requirements: Design Requirements" unless the ANSI standards or the applicable laws, rules, and regulatory requirements are more stringent.
- 4. Comply with the Contract Documents, unless the "Performance Requirements: Design Requirements", the ANSI standards, or the applicable laws, rules, and regulatory requirements are more stringent.

#### 1.4 Changes and Additions to Design Requirements

Complete the following document and submit it to the person to whom you are responsible to for ultimate decision by the Director, for requested changes/additions to the Design Requirements.

Design Requirement/Varia	nce Change Request
Project Name	Date
	DFCM Project Number
	Risk Management Number
Requested by	Entity
Brief Description of the Problem	
Design Requirements	
T of the	
Justification	
Director Approval	Date
	Date
Action to Include This Design Requirements in the Design Requirements	
Professional Reviewer	Position
Maintenance Reviewer	Position
Director Approval	Date

## 2.0 CODES / LAWS/ RULES AND REGULATORY REQUIREMENTS

#### 2.1 DFCM requirements include (but are not limited to):

- A. Administrative Services: Comply with Title R23: Administrative Services, Facilities Construction and Management. Refer to <a href="http://www.rules.utah.gov/publicat/code/r023/r023.htm">http://www.rules.utah.gov/publicat/code/r023/r023.htm</a>
- B. DFCM Services: Comply with Services requirements. Refer to <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. Services requirements include:
  - (1) Inspections and Testing, refer to http://dfcm.utah.gov/inspections/inspections.htm
  - (2) Standards, refer to <a href="http://dfcm.utah.gov/publications/dfcm\_standards.htm">http://dfcm.utah.gov/publications/dfcm\_standards.htm</a>
  - (3) Standard Project Documents, refer to http://dfcm.utah.gov/publications/dfcm\_standard\_project\_docs.htm
  - (4) Roofing, Paving, and Hazardous Materials, refer to <a href="http://dfcm.utah.gov/rphm/rphm.htm">http://dfcm.utah.gov/rphm/rphm.htm</a>
  - (5) Other requirements which may be added after this document is published.

#### 2.2 **Building Code Commission**

A. Comply with Utah Uniform Building Standards Act. Refer to <a href="http://www.dopl.utah.gov/licensing/statutes\_and\_rules/R156-56.pdf">http://www.dopl.utah.gov/licensing/statutes\_and\_rules/R156-56.pdf</a>. Enforcement of these codes is the responsibility of the State Building Official.

#### 2.3 Fire Prevention Board

A. Comply with Fire Codes in accordance with "Laws, Rules" of the State Fire Marshall. Refer to <a href="http://firemarshal.utah.gov/Laws\_Rules/laws\_rules.html">http://firemarshal.utah.gov/Laws\_Rules/laws\_rules.html</a>. Enforcement of these codes is the responsibility of the Utah Fire Marshall.

#### 2.4 Accessibility Code

A. Comply with the US Department of Justice Federal Registers – Americans with Disabilities Act. Refer to <a href="http://www.usdoj.gov/crt/ada/adahom1.htm">http://www.usdoj.gov/crt/ada/adahom1.htm</a>

#### 2.5 Labor-Industrial Commission

A. Comply with requirements of the Labor-Industrial Commission. Refer to <a href="http://www.labor.state.ut.us">http://www.labor.state.ut.us</a>.

- (1) Boiler and Pressure Vessel Compliance Manual, Refer to <a href="http://www.labor.state.ut.us/Safety\_Division/Regulation\_Updates/BPVManRev7D.pdf">http://www.labor.state.ut.us/Safety\_Division/Regulation\_Updates/BPVManRev7D.pdf</a>
- (2) Utah Occupational Safety and Health, refer to <a href="http://www.rules.utah.gov/publicat/code/r614/r614.htm">http://www.rules.utah.gov/publicat/code/r614/r614.htm</a>
- (3) Elevator Rules: American National Standard Safety Code for Elevators and Escalators, ANSI/ASME A17.1 with amendments administered by Labor-Industrial Commission of Utah, Department of Occupational Safety and Health Elevator Division. Refer to http://www.rules.utah.gov/publicat/code/r616/r616-003.htm

#### 2.6 Department of Health

- A. Comply with requirements of Department of Health. Refer to <a href="http://www.health.utah.gov">http://www.health.utah.gov</a>.
  - (1) Health Care Rules, refer to <a href="http://health.utah.gov/hflcra">http://health.utah.gov/hflcra</a>
  - (2) Utah Indoor Clean Air Act, refer to <a href="http://www.tobaccofreeutah.org/r392-510.htm">http://www.tobaccofreeutah.org/r392-510.htm</a>

#### 2.7 Department of Environmental Quality

- A. Comply with requirements of Department of Environmental Quality. Refer to <a href="http://www.deq.utah.gov">http://www.deq.utah.gov</a>.
  - (1) Public Drinking Water Rules, refer to http://drinkingwater.utah.gov/rules.htm
  - Utah Division of Air Quality: R307-801, Asbestos, refer to <a href="http://airquality.utah.gov/HAPS/ASBESTOS/rules/newrules.pdf">http://airquality.utah.gov/HAPS/ASBESTOS/rules/newrules.pdf</a>;
     Environmental Protection Agency (EPA): Regulations for Asbestos Code of Federal Regulations Title 40, Part 61 Subpart M; and Toxic Substances Control Act PART 763 (Updated 1997) ASBESTOS: OSHA Standards 1910.1001, 1915.1001, and 1926.1101
  - (3) Underground Storage Tank Act, refer to <a href="http://undergroundtanks.utah.gov/ust\_rules/r311\_rules\_9\_04.pdf">http://undergroundtanks.utah.gov/ust\_rules/r311\_rules\_9\_04.pdf</a>
  - (4) Air Conservation Act, refer to http://www.rules.utah.gov/publicat/code/r307/r307.htm
  - (5) Fugitive Dust Plan, Refer to http://www.rules.utah.gov/publicat/code/r307/r307-309.htm
  - (6) Utah Pollutant Discharge Elimination System, Refer to <a href="http://www.rules.utah.gov/publicat/code/r317/r317.htm">http://www.rules.utah.gov/publicat/code/r317/r317.htm</a>
  - (7) Operating Permits of the Division of Air Quality, refer to <a href="http://www.rules.utah.gov/publicat/code/r307/r307-415.htm">http://www.rules.utah.gov/publicat/code/r307/r307-415.htm</a>

#### 2.8 County Health Department (for the county where the facility is located)

A. Food Service Sanitation Rules

#### 2.9 Department of Commerce

- A. Pipeline Safety, refer <a href="http://www.rules.utah.gov/publicat/code/r746/r746-409.htm">http://www.rules.utah.gov/publicat/code/r746/r746-409.htm</a>
- B. Qualifications: Refer to the Project Participants heading of this document.

#### 3.0 DFCM REQUIREMENTS

These requirements are enhancements of code requirements that DFCM has initiated for best practices for State owned facilities.

#### 3.1 GENERAL

#### A. Distributed Live Loads

#### **Design Requirements**

Modify IBC Table 1607.1 "Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads" by the following:

Increase the Uniformly Distributed Live Loads to 80 psf for: Office use in Access floor systems; Operating room, laboratories, private rooms, wards in Hospitals; Reading rooms in Libraries; Offices in Office buildings; Classrooms in schools.

Increase the Minimum Concentrated Live Loads to 2500 lbs for: Office use and Computer use for Access floor systems; Operating rooms, laboratories, corridors above the first floor for Hospitals; Reading rooms, Stack rooms, Corridors above first floor in Libraries; Lobbies and first-floor corridors, offices, corridors above first floor in Office Buildings; Classrooms, Corridors above first floor, First floor corridors in Schools.

#### **B.** Energy Conservation Requirements

#### **Design Requirements**

Design facilities (except residential facilities) to reduce by 10%, or more, the energy cost using current utility rates, as compared to the performance of a reference building prescribed in Appendix G of ASHRAE/IESNA 90.1. Calculate the percentage of energy conservation savings (ECS) by dividing the proposed energy cost budget for the proposed facility (PR) by the reference building (addendum e) cost budget (BL) and subtracting the result from 1 and multiplying by 100 will give the percentage of energy cost savings: % ECS = 100 (1-PR/BL).

In order to achieve these requirements, DFCM requires that the Engineer design in accordance to the requirements of ASHRAE/IESNA 90.1 and not use the exception in Section 701.1 of the International Energy Conservation Code. The DFCM's Designated Representative may authorize exemptions to the 10% energy cost savings requirement for existing buildings so long as the

building complies with the minimum requirements of ASHRAE 90.1 paragraph 4.1.2 and the related subparagraphs. The Director of DFCM may authorize a lower level of energy efficiency when the standard is not achievable due to the unique circumstances of a particular project or the constraints of the project budget.

In order to achieve the most cost effective energy savings, DFCM requires compliance with the minimum requirements set by the mandatory and prescriptive requirements of ASHRAE/IESNA 90.1.

The 10% energy cost savings shall be documented through simulation of both the reference facility and the proposed facility, using the methodology in ASHRAE 90.1 Informative Appendix G and a DOE 2.x energy simulation program. The required schematic design submittal shall include the documented model for the reference building. The required design/development submittal shall include revisions, if necessary, to the documented model for the reference building and a progress model for the proposed building. The required construction documents submittal shall include revisions, if necessary, to the documented model for the reference building and a documented model for the proposed building validating the 10% energy cost savings. In addition, Mandatory and Prescriptive Compliance shall be demonstrated by including the Envelope Compliance Certificate, Mechanical Compliance Certificate, and the Lighting Compliance Certificate from COMchek-EZ for the most current software for ASHRAE 90.1. Alternatively, for LEED projects the LEED validation for 10% energy conservation savings may be substituted.

DFCM wishes to participate, when possible, with Utah Power under their Energy Finance Program.

#### C. Enhanced Accessibility

#### **Design Requirements**

"It is the policy of the Utah State Building Board that, when appropriate for the intended use of the building and achievable within the project budget, the following accessibility enhancements beyond those required by the Americans with Disabilities Act be provided for in state owned buildings and buildings leased by DFCM: (1) powered door openers for the primary entrance designated for use by people with disabilities, and (2) powered door openers for one uni-sex restroom or for one male and one female restroom in the building unless restrooms with a doorless entry are provided. This policy is not intended to limit the use of powered door openers to the standard set forth herein. This policy applies to the construction or major renovation of state-owned facilities and new leases where the entire building is being leased by DFCM. This policy is not intended to create any rights to any third parties.

Determinations that one or both of these enhancements are not appropriate for the intended use of the building or not possible within the project or lease budget shall be made by the Director or his designee. Determinations of whether this enhancement to accessibility is appropriate should consider the potential of access by people with disabilities. The Director may determine that powered door openers are appropriate for the primary entrance while not warranted or not possible within the budget for access to restrooms. The Director may also determine that one or

both of these enhancements are not feasible in (a) the renovation of an existing building due to its design or configuration or (b) in a leased facility due to the nature and circumstances of the lease."

#### D. Sustainable Design

#### **Design Requirements**

Utilize LEED<sup>TM</sup> as a checklist of opportunities to improve environmental quality and energy efficiency; however, it is DFCM's policy not to apply for LEED<sup>TM</sup> certification. Make recommendations of which opportunities should be implemented in accordance with budget constraints to the DFCM's Designated Representative. Obtain approval of DFCM's Designated Representative prior to implementing recommendations.

#### E. Hazardous Materials

#### **Design Requirements**

DFCM shall procure a qualified abatement consultant during the Schematic Design phase of the Design stage. The abatement consultant shall survey all renovation and demolition projects for hazardous materials such as asbestos-containing building materials, lead-based paint, mold, universal wastes such as PCBs, CFCs, mercury, household/janitorial cleaning products, identified/unidentified containers of chemicals or products, or any other materials or waste that may be environmentally unsafe.

Prior to the start of a survey by the abatement consultant, the A/E shall provide drawings at the design development phase of the design stage to the abatement consultant with sufficient information to define the building or facility areas affected by the renovation or demolition. The abatement consultant shall coordinate abatement documents with the updated Contract Documents prior to final preparation. The abatement consultant shall prepare a complying and comprehensive hazardous materials survey report identifying and quantifying all hazardous and non-hazardous building materials to include asbestos-containing building materials, lead-based paint, mold and universal wastes that affect the areas of renovation or demolition.

DFCM shall procure a qualified abatement contractor to remove all hazardous materials prior to the beginning of any building demolition or renovation.

#### F. Vibration

#### **Design Requirements**

Design structure in accordance with the following minimum requirements for vibration:

Vibration	
Space Category	Vibration Sensitivity
Laboratories with equipment	Comply with manufacturer's requirements for
sensitive to vibration	vibration.
Offices, classrooms, and	There are no vibrations from machines or traffic
other similar spaces.	which are detectable by people.
Common Area spaces	There is occasional movement in the floor when
Common Area spaces.	heavy equipment are moved nearby.
	There is obvious and annoying movement when
Storage spaces.	people walk by or equipment is being moved
	nearby.

#### G. Utah Space Standards

#### **Design Requirements**

Comply with the "Utah Space Standards," August 1994. Refer to http://dfcm.utah.gov/publications/publications\_files/space\_standards.pdf

#### H. Infrastructure Flexibility

#### **Design Requirements**

<u>Interior Shear Walls:</u> Minimize interior shear walls, bearing walls and braced frames which may disrupt future additions or modifications to the facility.

<u>Spare Mechanical Space:</u> Provide 25% spare space in pipe chases and for mechanical equipment (except air handlers).

<u>Main Electrical Room:</u> Locate main electrical room close to transformer and near the center of the load (which is usually located near where central mechanical equipment is located). Locate panelboards in satellite electrical rooms dedicated for electrical equipment and which stack vertically in the facility.

<u>Spare Electrical Capacity:</u> Provide 25% future space for additional overcurrent protection devices in panelboards and switchboards. Provide 25% additional load capacity in addition to the capacity required for continuous loads in panelboards and switchboards.

<u>Communication Rooms:</u> Locate communications rooms so they stack vertically and comply with TIA/EIA standards.

<u>Spare Communication System Capacities:</u> Provide 100% future space (this is not necessarily horizontal space, but may be vertical space in racks for future equipment) for cabling, data, and communications electronic equipment.

<u>Equipment Access</u>: In new facilities, provide access for replacement of equipment which does not require demolition.

Storage Space: Provide a minimum 6' X 6' space for storage of janitorial supplies or .2% of the gross square footage, whichever is greater.

#### **3.2 CIVIL**

#### A. Paving

#### **Design Requirements**

Use untreated base course under all curbs and gutters. Use untreated base course material under all sidewalks exterior flatwork and paved areas.

Untreated base course under asphalt paving: Asphalt - 8" minimum compacted base (96%) Concrete – curbs, gutters, sidewalks, exterior flatwork – Minimum 6" compacted base (96%) or minimum 4-3/4" crushed gravel.

Untreated Base Course	
Size	% by Weight Paving Sieve
1"	100
1/2"	70 to 100
#4	41 to 68
#16	21 to 41
#50	10 to 27
#200	4 to 13

Surface course (asphalt) aggregate:

Surface Course (asphalt)	
Size	% by Weight Paving Sieve
1/20/0	100
3/8"	70 to 100
#4	50 to 78
#16	30 to 48
#50	18 to 31
#200	7 to 13

Base course (lower lift) can be <sup>3</sup>/<sub>4</sub>" asphalt if placed in more than 1 lift.

Construct asphalt paving only when atmospheric temperature is above 50 degree F and underlying base is from moisture. Permit no vehicular traffic for at least 24 hours after laying asphalt pavements.

Striping paint: State of Utah #780. Spread at the rate of 103-113 sf/gal. Minimum thickness shall be 7 dry mil.

Tack coat all adjoining materials, i.e. previously constructed asphalt, concrete, etc. except untreated base course.

Surface smoothness: variation in the finished surface must not exceed 1/8" in 10 ft. in any direction

Asphalt shall comply with Marshall Design with voids 1.5% to 3.0%

Drainage: Slope all asphalt concrete paving surfaces for positive drainage a minimum of 1.5% and preferable 2%.

Minimum thickness for parking areas: 3". Minimum thickness for road areas and truck traffic is 3" including dumpster access.

Maximum thickness for lifts: 3"

#### 3.3 ARCHITECTURAL

#### A. Suspended Ceiling Systems

#### **Brief Description of the Problem**

In as much as the IBC requires that suspended ceiling comply with the requirements of section 9.6.2.6 of ASCE 7 for installation in high seismic areas, the code section has 3 requirements which have been problematic in application:

- The width of the perimeter supporting closure angle must be not less than 2 inches and the grid must have a <sup>3</sup>/<sub>4</sub>" clearance from the wall. This requirement has created an aesthetic nightmare for architects and contractors since the 2" angle brings out all irregularities on the plane of the wall and requires increased inspection time to ensure a <sup>3</sup>/<sub>4</sub>" clearance.
- 2) Except where rigid braces are used to limit lateral deflection, sprinkler heads and other penetrations shall have a 2 inch oversize ring, sleeve, or adapter through the ceiling tile to allow for free movement of at least one inch in all horizontal directions. Alternately, a swing joint is permitted to accomplish the same movement. The issues with this requirement is that the Fire Marshall and the fire protection community will not approve

any oversize rings, sleeves or adapters which are not listed for this use and currently there are not listed systems on the market. The use of the swing joint is not defined in the code and no one has been able to establish how many joints are necessary to accomplish the horizontal movement of one inch in all directions.

3) Special inspection is required for suspended ceilings. This requirement is once again a problem since the ICC does not have a certification system for a ceiling inspector and we end up using a regular code inspector.

IBC section 104.11 allows the Building Official to approve alternate designs or methods of construction which he feels are equivalent or meet the intent of the current code. Uniform Building code Standard 25-2 for metal suspension systems for acoustical tile and for lay-in panel ceilings that can be found in the 1997 edition of the UBC is an equivalent standard that has been used in the codes for many years. This standard offers protection in all the seismic areas in the state and does eliminate all three of the issues identified above.

The State of Utah will allow the use of the 1997 UBC Standard 25-2 as an alternate means for the installation of suspended ceilings. This standard should remain available until all the issues identified above have been addressed by ICC and the listed materials are available in the market place. The designers may still use the current code requirements found in the 2003 IBC if they can show that they have met the intent of the current code.

#### B. Daylight and Outside Views

#### **Design Requirements**

Daylight and outside views are desirable for all occupied spaces. The needs of some occupied spaces may require special consideration for light control.

#### C. New Roofing Requirements

#### **Design Requirements**

Comply with <u>Contractor Roofing Warranty</u>: <u>Include DFCM requirements</u>. <u>Refer to http://dfcm.utah.gov/rphm/5yr warranty.pdf</u>

Comply with <u>Guaranty for Bituminous Roofing</u>: <u>Include DFCM requirements</u>. <u>Refer to http://dfcm.utah.gov/rphm/bur\_warranty.pdf</u>

Comply with <u>Guaranty for Single-Ply Roofing: Include DFCM requirements. Refer to http://dfcm.utah.gov/rphm/singleply warranty.pdf</u>

Comply with the list of DFCM approved manufacturers and approved installers. Refer to http://dfcm.utah.gov/rphm/manufacturers.pdf

Where manufacturer's standards show one or more possible approach for compliance to the standard, provide their most stringent approach.

Eliminate conflict between roof penetrations (i.e. vents, exhausts) and roof crickets, flashing, and valleys. Consider relocating penetrations to less visible areas. Provide 18" access for replacing roofing components.

In new facilities, build slope into roof structure in lieu of built-up insulation to solve roof drainage issues.

Minimum slope for all roofing and waterproofing systems shall be a 1/4" per foot along the longest drainage path.

Do not provide the following components, unless approved by the Director:

Other Roofing Components: ballasted roofs.

All roofing systems and components should meet or exceed all ASTM, UL and FM requirements.

Minimum 60 mil thickness required for all single ply roofs.

Minimum 4-ply, type VI felts with type III asphalt for all built-up roofs.

All metal associated with the roof should be color clad, use standing seam joints where possible. Follow SMACNA guidelines for all metal work.

Provide reasonable access to all roof levels for maintenance personnel.

Steep slope roofing should be designed as directed by the DCM Program Manager.

Comply with all other minimum standards as published by the DFCM roofing group.

#### D. Replacement Roofing Requirements

#### **Design Requirements**

Comply with Design Requirements Record Roofing Requirements.

<u>Existing Roof System Components:</u> For existing roofs, evaluate the feasibility of using existing insulation, sheet metal and other existing roof system components if they are in like new condition and will not have a deleterious effect on the new roof system.

<u>Roof Slope:</u> Each existing facility project shall be evaluated to determine existing roof slope and if additional slope is required to eliminate ponding.

<u>Roof Diaphragm:</u> Evaluate the existing roof to determine whether the diaphragm needs to be upgraded to meet current seismic requirements. Report shall include: 1) Existing conditions related to current requirements; 2) Recommendations for upgrading the diaphragm relative to an upgrade of the facility; 3) Estimated costs for upgrading the diaphragm.

Roof Load Evaluation: Evaluate the existing roof deck structure to determine the existing dead and live load capacity. The weight of the entire roof system shall not exceed an amount that would reduce the live load capacity of the roof structure below the current requirements. Report shall include: The existing conditions relative to current requirements; 2) Recommendations for upgrading the load capacity, relative to an upgrade of the facility; 3) Estimated costs for upgrading the structure.

<u>Vapor Retarder</u>: Determine the need for vapor retarder based on dew point calculations, facility use, and existing facility and roofing system conditions.

#### E. Waterproofing and Sealants

#### **Design Requirements**

<u>Warranty</u>: For sealant systems, guarantee both labor and materials for a minimum of two years. For waterproofing project, guarantee both labor and materials for a minimum five years.

<u>Qualifications:</u> For Dampproofing and Waterproofing, select products that have performed successfully for a minimum 15 years and select manufacturers that have been producing materials for 15 years.

#### F. Acoustical Quality

#### **Design Requirements**

When possible, design spaces in accordance with following minimum requirements for "Privacy."

Privacy	Privacy	
Space Category	Measured NIC Rating	
Confidential with high voice levels	58-60+	
Confidential with slightly raised voice levels	52-58	
Confidential with normal voice levels	50-52	
Confidential with lowered voice levels	45-50	

Design spaces in accordance with the following minimum requirements for "Ambient Background Noise.

Ambient Background Noise	
Space Category	Measured NC Rating
Critical Performing Spaces	<20
Performing Spaces, Courtrooms, Executive Offices	20-30

Sleeping, testing, or relaxing spaces	25-35
Private offices, small conference rooms, classrooms, libraries	30 -35
Open offices, reception areas, cafeterias, gymnasiums	35-40
Lobbies, laboratories, maintenance shops	40 -45
Kitchens, industrial shops, equipment rooms	45-55

#### G. Guardrails

Comply with code requirements for opening size but orient the members so that a ladder effect does not occur.

#### 3.4 STRUCTURAL

#### A. Concrete

#### **Design Requirements**

<u>Warranty</u>: Provide additional two-year written guarantee commencing on the date of substantial completion to promptly remove and/or repair defective concrete (pitting, spalling, cracking, honeycombing, etc.).

Concrete Strengths & Testing: Provide minimum compressive strength measured at 28 days of 3000 psi for foundations, stem walls, piers, miscellaneous interior walls, etc., and 4000 psi minimum for all exterior flatwork, ramps, curbs, gutters catch basins, concrete pavements, interior floor slabs, elevated slabs, shear walls and columns. DFCM allows shear wall and columns to be specified in excess of 4000 psi. Specify pre-cast concrete with a minimum strength of 5000 psi.

<u>Cement Types</u>: Comply with the recommendations of the Geotechnical report. DFCM requires one of these types: Type I or Type II (both low alkali) and Type V. In southern Utah, usually select Type V. In other parts of the state select Type I or Type II (low alkali).

Concrete Mix: Provide low alkali cement for all concrete in direct contact with earth. Specify water/cement rations in accordance with ACI 318. Specify number of bags of cement per/yard in accordance with C150. Provide admixtures complying with the requirements of ASTM C260 for air entrained concrete. Do not use "IA", "IIA", etc. For frost resistant concrete, the following minimum air contents are required for concrete in direct contact with soils or exposed to severe salting: for <sup>3</sup>/<sub>4</sub>" maximum aggregate size per C33, provide air content per ASTM C260 of 6-1/2%+1-1/2%; for 1", provide 6%+1-1/2%; for 1-1/2", provide 5-1/2"+1%. Water cement ratios shall be limited to 0.50. (excluding grout mixes) The slump of all concrete shall be limited to 4" unless plasticizers are used. A maximum of 10% fly ash is allowed.

<u>Testing</u>: DFCM shall pay for testing, unless other procedures are specified. The frequency and minimum numbers of test cylinders shall be as outlined in the IBC, however at least three test cylinders must be taken from each pour related to a structural member. The intent is to not to do

testing on concrete for items such as curb, gutter, sidewalk, mow strips, light pole bases, etc.

<u>Reinforcement:</u> Reinforce all concrete with conventional rebar or welded wire fabric. Slabs on grade supporting less than 400 psf uniform loads and no rack loads may be un-reinforced. The sub-base for all un-reinforced slabs must be uniformly compacted with on-site observation and per requirements specified in the project specifications.

#### 3.5 MECHANICAL

#### A. Controllability of Systems

#### **Design Requirements**

Maintaining space comfort temperature is an important consideration in the design of the mechanical system along with the proper ventilation within each space. This is accomplished best by the proper zoning of the space with regards to the mechanical system installed and the ability to control the temperature within each zone. The zoning for control of the space temperature shall be such that corner spaces having multiple exposures, office spaces for directors, managers, or other such individuals, and conference rooms larger than 200 square feet, shall have individual space control. Other multiple spaces shall be zoned with these spaces of like size, occupancy, and exposures are one zone and do not exceed more than four spaces per zone. Open spaces, such as open offices, shall not exceed one zone per every 750 square feet. Individual classroom spaces may be zone as a single zone even if the space exceeds 750 square feet with consideration for noise and air distribution (some large classroom spaces may need more than one zone for temperature control). Laboratory space zoning will be matched to the exhaust requirements for the labs and size of the laboratory space.

#### B. Indoor Air Quality

#### **Design Requirements**

Comply with ASHRAE 62.1-2004 and all approved addenda for Indoor Air Quality performance.

Comply with the carbon dioxide differentials for all types of occupancy are accordance with ASHRAE 62-2001, Appendix D.

#### C. Plumbing General Requirements

#### **Design Requirements**

<u>Insulation</u>: Completely insulate the following systems: all domestic cold water piping above ceiling; all domestic hot water piping and recirculation lines; roof drain and overflow piping including horizontal piping above ceilings, vertical piping below roof drain bowl, and roof drain

bowls. Provide protective covering for exposed insulation in areas subjected to damage.

Exterior piping insulation: Cover all insulation with aluminum jackets secured with aluminum bands 12 inches o.c. Seal joints watertight.

<u>Main plumbing connections</u>: Locate main water, and sewer connections and mechanical rooms on the same side of site as service, preferably close to maximum demand points such as core toilet stack, kitchens, boiler room, and fire protection systems.

<u>Piping installation:</u> Install piping overhead wherever possible. Avoid installing piping below or in concrete slab floors. Install piping on warm side of building insulation. Provide water-tight sleeve and caulking around pipe for all piping passing through floors.

Exposed pipe: comply with ASTM 53.

Underground pipe: comply with ASTM A106.

Roof drains: provide minimum 3 inch roof drains.

<u>Equipment Pads</u>: Provide minimum 4" high concrete bases for all pumps, air compressors, boilers, chillers, and other equipment.

<u>Valves:</u> Install valves with bonnets at least 45 degrees above the horizontal to ensure debris does not collect in bonnet.

#### D. Water System

#### **Design Requirements**

<u>Municipal Water Meter</u>: Each facility shall have a compound water meter installed in the water line serving the facility in accordance with local water authority.

Campus Water Meters. Install meter in the main mechanical room or within easy access of mechanical spaces. If conditions do not permit inside installation, provide meter box outside. Where fire sprinklers are installed, the fire main shall be connected ahead of the meter. Where outside meters are used, the meter box shall be 52" x 81" x 71" high with a concrete base under the meter, but the rest of the floor shall be gravel. Top shall have recessed eyes. Top to be poured separate so it can be moved off with a crane and the eyes shall be left large enough to insert a chain by which can be lifted. Cover to have a 24 inch locking meter lid in center. Position meter so it can be read without personnel entering the vault. Water meter indicator shall be the totalize type reading directly in gallons of water. Water meter shall be installed with valves on both sides so meter can be removed and a bypass line installed. Sleeve around pipes passing through walls of meter box.

<u>Domestic Water Pressure</u> shall be maintained at a reasonable operating pressure, i.e., 50 - 80 psig.

<u>Valves:</u> Provide valves near the main with a union for all branch lines of water which supply more than one outlet or unit so areas of the building may be shut down for repair without having to shut down large areas. Provide isolation valves as necessary and provide, as a minimum, valves for each toilet group outside of the toilet room, each floor, and each branch line that is 2" or greater Provide a shutoff valve on all water supply lines on the room side of the fixture. Valves shall have a gasket seat, not a ground joint. Supply lines from the valve shall be 3/8" brass, chrome plated. Provide chases or access panels to access valves. In lieu of oversized globe valves, ball valves with full opening ports and adequate pressure and temperature rating may be provided up to two inches in size. For valves greater than two inches in size, butterfly valves with wheel and gear operator may be used.

<u>Water relief valves:</u> Connect water relief valve exhaust or discharge to nearby floor drain. Provide sump in pipe tunnels at each cleanout. Provide floor drains in toilet and utility rooms.

<u>Faucets and hose bibs:</u> Provide non-freeze type hose bibs with shut-off valves for the lines serving the hose bib located inside facility. Provide faucet with hose attachment and vacuum breaker in each restroom so floor can be washed with clean water. Provide hose bib with vacuum breaker in mechanical rooms and chiller rooms. Provide non-freeze hose bib with vacuum breaker near cooling tower. Provide hose bibs outside building for window washing, walk and area way washdown (generally not more than 150' on center).

<u>Inaccessible Water Piping:</u> Provide Duiron cast iron pipe, PVC "Blue Brute", or copper up to 2 inches in size, for water lines under building slab or other inaccessible locations.

<u>Soil cover for outside services greater than 6000 HDD</u>: Provide minimum cover of 48" or preferred cover of 60" for water. In no instance shall the minimum depth be less than the frost line

<u>Soil cover for outside services less than 6000 HDD</u>: Provide minimum cover of 36" or preferred cover of 48" for water.

#### E. Waste System

#### **Design Requirements**

<u>Pipe Tunnel Sumps:</u> Provide sump in pipe tunnels at each cleanout. Sump shall be three foot square and four feet deep with grating cover and porous walls. Floor drains may be used in lieu of sump if depth of waste line is such that drains may be tied in.

<u>Drains:</u> Provide drains indirectly connected to building drainage system for walk-in refrigerators and other places where food is stored. Provide floor drains in toilet and utility rooms. Provide deep seal P-traps on all floor drains.

<u>Equipment Room Floor Drains</u>: Trenches with grating covers with bottoms sloped to drain are preferred over multi-floor drains in mechanical equipment rooms and some laboratories.

<u>Water still drains</u>: Provide Kimax glass to nearest main drain from water still drains or provide glass pipe for the first 20 feet horizontally or to the floor below. Provide cleanout at water still and at main drain line before glass is connected with soil piping

<u>Waterproofing pans</u>: Provide membrane or lead waterproofing pans for shower stalls and custodial floor sinks so they are 100% water tight. Provide clamping device which clamps drain to pans. Provide a mastic seal between floor drain bottom and lead or membrane so when clamping device is tightened there is a complete seal so no water can get through. Do not clog weep holes. Test pans by placing test plug in drain and filling with water overnight.

<u>Dishwasher connections</u>: Provide indirect connection for waste on automatic dishwashing machines. Install minimum 3" drain so that it is accessible under conveyor table.

<u>Cleanouts</u>: Provide cleanouts at base of each vertical rise, each turn in excess of 45 degrees inches and on straight runs every 50 feet.

<u>Horizontal Waste lines:</u> Provide dedicated minimum 3" horizontal waste lines with adequate cleanouts for garbage disposals and dishwashers.

Roof drains: Roof drain piping shall not be less than 3 inches.

<u>Flush valves:</u> Provide screwdriver stop valves on flush valves for water closets and urinals. Provide exposed type flush valves.

#### F. Plumbing Fixtures and Equipment

#### **Design Requirements**

<u>Water Heaters:</u> Coordinate installation so that nothing will interfere with the removal of water heaters or for heating coils in heat exchangers to allow for periodic cleaning. Provide unions for all connecting piping to facilitate the removal of piping. Provide combination temperature and pressure relief valve piped to adequate drain. Where feasible install flexible connections and tiedown straps to accommodate movement during seismic events.

<u>Toilet Room Fixtures</u>: Provide exposed type flush valves with lever operator (no push buttons or floor operators), diaphragm type only. In restrooms subject to vandalism, provide concealed flush valves. If space and budget allows, flush valves may be concealed in other applications. Hands free sensor actuated valves are acceptable, if acceptable by the Agency. Provide fixtures manufactured by one manufacturer.

<u>Showers:</u> Provide non-scald type shower valve with integral stops. Provide institutional type shower heads with flow adjustment and adjustable head and spray. Extend head out from wall so water does not run down wall when valve is turned off. Heads shall be vandal proof. Provide watertight shower escutcheon with weep hole in bottom.

<u>Waterproofing pans</u>: Provide membrane or lead waterproofing pans for shower stalls and custodial floor sinks so they are 100% water tight. Provide clamping device which clamps drain to pans. Provide a mastic seal between floor drain bottom and lead or membrane so when clamping device is tightened there is a complete seal so no water can get through. Do not clog weep holes. Test pans by placing test plug in drain and filling with water overnight.

<u>Drinking Fountains:</u> Provide refrigerated type, wall hung drinking fountains with stainless basins. Provide removable grid strainer to enable cable-style cleaning without having to dismantle the fountain.

Do not specify the following components, unless approved by the Director:

Toilet Room Fixtures: Tank type

#### G. HVAC General

#### **Design Requirements**

<u>Heating systems</u>: Hot water systems are the preferred heating systems. Provide air separators and expansion tanks for all hot water heating systems regardless of piping arrangement. Tie air separators into piping system on suction side of circulating pump. If campus system hot water system is turned off during the summer, provide alternate heating system for equipment requiring a heating source.

<u>HVAC</u>: Locate mechanical rooms to take advantage of ductwork and piping proximities to major loads. Provide continuous cooling for telecommunication and main telecommunication room. Carefully coordinate the location of any exhaust or relief air with mechanical air intake systems to avoid short cycling. Provide dedicated relief air path for all systems which introduce outside air. Exfiltration through the building envelope does not comply with this requirement.

<u>Redundancy</u>: Provide for continuous operation through redundancy and/or modularization for facilities greater than 30,000 sf or which have critical functions or critical care residents. The loss of one half or less of the design cooling or heating system for the entire facility shall be tolerated temporarily in the event of equipment failure for: heat pumps, boilers, refrigeration machinery (excluding cooling towers), and condensate pumps.

Access: Provide stair access to equipment. Provide disassembly access for all valves, piping, and equipment.

<u>Water Treatment</u>: Provide water treatment for heating water systems, chilled water systems, condenser water systems, and steam systems. Provide for one year on site service by water treatment company including supply of chemicals. Provide treated water in the heating system until facility is accepted by DFCM.

#### H. Air Distribution

#### **Design Requirements**

<u>Filtration:</u> Air handling equipment shall be fitted with filters in the medium efficiency category having and average efficiency of 25% to 35% based on MERV rating criteria. Specify that the Contractor replace all filters prior to building occupancy and provide one replacement set of filters for the entire facility. For air handlers exceeding 10,000 cfm, provide pressure differential instrumentation across the filter bank to facilitate maintenance.

<u>Ductwork Materials:</u> Provide rectangular and round ductwork from galvanized steel, stainless steel or aluminum. Leakage requirements shall meet or exceed SMACNA standards.

<u>Volume Adjusting Devices:</u> Provide devices that can be securely locking in place and that are accessible for adjustment after construction.

#### Do not provide the following components, unless approved by the Director:

<u>Duct Lining</u>: lining of outside air ducts, lining of ductwork within 10 feet downstream of any device that adds moisture to the air stream, line of ductwork exposed to humid air stream above 70% RH such as swimming pool applications.

<u>Ductwork</u>: Fiberboard ductwork.

#### I. Piping System

#### **Design Requirements**

<u>Piping Systems</u>: Piping system shall be provided with manual air vent valves at system high points and drain valves at system low points. Suitable provisions, such as access panels, shall be furnished in building construction to permit full access to these valves. Manual air vents shall be 3/8" globe valves with ½" copper tubing to near floor or to locations where water may be caught in bucket. Drain valves shall be threaded for ¾" hose connections. Provide water-tight sleeve and caulking around pipe for all piping passing through floors.

<u>Pumps:</u> Provide pressure gauge with gauge cocks as close to pump suction and discharge as possible and avoid pressure drops across valves, strainer, flexible connectors, etc. Provide suitable throttling valves on discharge side of all pumps, such as globe valves,-or balancing cocks. Throttling valve shall have set point position indicator and shall not be used for shut-off valve.

Exposed pipe: comply with ASTM 53.

<u>Underground pipe</u>: comply with ASTM A106.

<u>Air Vents:</u> Provide suitable air vents for all heat producing equipment (converters, unit heaters, coils, etc.).

<u>Valves:</u> Provide valves near the main with a union for all branch lines of water or steam which supply more than one outlet or unit so areas of the building may be shut down for repair without having to shut down large areas. For valves 2" and larger on systems greater than 200 degrees F shall be flanged or grooved.

#### J. Steam

#### **Design Requirements**

Motor Operated Steam Valve: If the existing central plant serving the campus is a steam system, provide a motor operated steam valve for each new building. Coordinate location with the Agency. If equipment requires steam when the valve may be closed, connect equipment ahead of motor operated steam valve. Design for gravity flow of condensate in lieu of providing vacuum pumps. Provide tunnels, chases, access doors, or crawl spaces for accessing steam piping. Do not install underground or in split tile. Provide properly dripped steam mains. Provide drip legs ahead of all steam pressure reducing valves and steam coils to ensure clean, dry steam at the valve.

<u>Valves</u>: Low pressure steam valves shall have a 200 psi rating and allow renewable seats and discs. For 100 psi steam line use 25 psi flanges and 300 psi screwed valves. Provide valves near the main with a union for all branch lines of steam which supply more than one outlet or unit so areas of the building may be shut down for repair without having to shut down large areas.

Steam piping: For steam piping 2" and smaller, provide schedule 80 black steel. For sizes 2-1/2" or larger, provide schedule 40 black steel for low pressure steam (15 psig or less) and schedule 80 black steel for high pressure steam (higher than 15 psig). Provide low pressure steam valves with a 200 psi rating and allow renewable seats and discs. Provide 250 psi flanges and 300 psi screwed valves for 100 psi steam lines.

Condensate piping: Provide schedule 80 black steel pipe, including underground return lines.

<u>Underground steam lines</u>: Provide Gilsulate, Ric-wil, Portage and Durrant insulated underground pipe for underground steam lines. If pre-insulated piping is used, provide separate insulated conduits for steam and condensate return piping.

<u>Expansion Provisions</u>: Provide expansion loops, swing joints, offsets, etc., for expansion of piping. Do not use expansion joints except when expansion loops, offsets, swing joints, etc., are possible due to space constraints. If expansion joints are provided, provide adequate internal or external guides that are properly supported anchored. Do not provide swing joints on main runs; however, swing joints may be installed on risers off the main.

<u>Pressure reducing stations</u>: Provide pilot-operated valve for pressure reducing stations. Provide a three-valve by-pass at all reducing stations with ample clearance to permit normal maintenance and inspection. Recommend parallel pressure reducing stations when low demand is expected. Provide safety relief valves on the low pressure side of regulator stations. Provide discharge

piping to facility exterior in a safe location. For pipes discharging near grade, install pipes into an eight inch concrete tie set upright in the ground (buried) over a gravel base twelve inches deep. Provide pressure gauges on both the high pressure and low pressure sides of all regulator stations. Locate gauges so they will function when bypass is used.

Steam Meter: Provide totalizing type meter which reads directly in pounds of steam.

<u>Miscellaneous Requirements</u>: Provide eccentric reducers when steam piping changes pipe sizes. Provide water-tight sleeve and caulking around pipe for all piping passing through floors.

#### K. Natural Gas

#### **Design Requirements**

<u>Seismic gas shut off valve</u>: Provide a seismic gas shut off valve installed per manufacturer's instructions for each natural gas system.

<u>Natural Gas Piping:</u> Weld all concealed natural gas piping if larger than 4". Where feasible install flexible connections and tie-down straps to accommodate movement during seismic events.

<u>Soil cover for outside services greater than 6000 HDD</u>: Provide minimum cover of 24" or preferred cover of 36" for gas.

<u>Soil cover for outside services less than 6000 HDD</u>: Provide minimum cover of 24" or preferred cover of 36" for gas.

#### L. HVAC Equipment

#### **Design Requirements**

<u>Boilers</u>: Provide boiler backup by redundancy or modularization. If a power burner is specified, the A/E shall determine the maximum allowable length of positive pressure flue.

<u>Unit Heaters:</u> If a unit heater is higher than 10' AFF, a centrifugal blower shall be provided and not a propeller fan. Provide all gas or oil unit heater with a 2-stage thermostat. On call for heat, the stage cycles the fan. The second stage fires the burner. For shop applications with heavy duty or corrosive atmospheres, provide sealed combustion units that bring combustion air from outside the space.

Water Chillers: Specify appropriate ARI Standards and certification.

<u>Cooling Towers:</u> Specify certification by the Cooling Technology Institute.

<u>Converters:</u> Provide side inlets and side outlets for all converters. Provide pressure gauges with snubbers on the primary and secondary side of each converter. Install thermometers on the inlet and outlet of the secondary side of each converter.

#### Do not provide the following components, unless approved by the Director:

HVAC Equipment: electric resistance heat, furnaces.

#### M. Integrated Automation

#### **Design Requirements**

<u>Direct Digital Control:</u> Provide direct digital control in all facilities, except where operations personnel require pneumatic control as an extension of an existing system. Provide digital metering of electrical, hot water, steam, and chilled water sources to each facility. Provide flow metering devices hot water heating systems. Provide straightforward DDC control systems. Avoid locating thermostats on outside walls or on partitions between offices. For perimeter radiant systems, provide Hydronic piping subcircuits to match the cooling zones.

<u>Control valves</u>: Provide visual position indicators. Provide control valves with stem in the vertical position. If possible, provide packless valves. Do not provide "self-contained" valves.

<u>Dampers</u>: Provide low leakage design of felt or neoprene edges for fresh air and exhaust air dampers. Provide opposed blade type modulating dampers with maximum blade width of eight inches. Provide fresh air dampers that close in fan shutdown or power failure. Provide steel trunnions mounted in bronze sleeve bearing or ball bearings for damper blades. Do not exceed 48 inches in length between damper bearings. Provide dampers that close substantially tight and provide substantially the full area of the opening when open. Provide substantial bar or channel frames for dampers. For rectangular dampers larger than four square feet in area, provide additional corner bracing.

<u>Thermostats:</u> If system supports DDC monitoring, provide solid state thermostats. Thermostats in corridors, halls, restrooms and other similar unsupervised areas shall be flush mounted aspirating type with stainless steel cover. Thermostats in public, but supervised areas shall have locking covers with concealed adjustment. Thermostats in private offices may have exposed adjustments.

<u>Panels</u>: Provide control devices, relays, piping, wiring and terminals in cabinets, except that switches, pilot lights, and push buttons mounted on the door. Provide minimum 14 gauge steel or 12 gauge aluminum. Equip doors with hinges, latches, and locks. Secure panels to walls, columns or floors with clearances required by NEC. Provide two (2) keys for each panel.

<u>Wall Mounted Control Diagrams:</u> Provide plastic laminated copies of all applicable controls diagrams mounted on the wall in each equipment room.

Control wiring: Provide control wiring in raceway complying with the requirements of DIV 16, except that ½" C may be installed for control wiring of less than 50 volts which complies with NEC conduit fill requirements.

# N. Automatic Sprinkler Systems

# **Design Requirements**

Provide an automatic sprinkler system in buildings when required by the building codes adopted by the State of Utah.

It is desirable that all buildings constructed by the State of Utah be equipped with an automatic sprinkler system to provide added life safety for the occupants and to protect the building from fire loss.

Fire sprinklers shall be considered as an integral component of building design when the availability of water supply and the cost do not make the installation prohibitive.

Secondary structures and small buildings or buildings with low occupant loads may be excluded from this requirement with the approval of the Director.

# 3.6 ELECTRICAL

# A. Emergency Electrical Requirements

# **Design Requirements**

Modify paragraph 700.12 General Requirements of the NEC to:

"Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both shall be available within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes for buildings totaling less than 5000 sf, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12 (A) through 7001.12 (E). Unit equipment in accordance with 700.12(F) shall satisfy the applicable requirements of this article for buildings totaling less than 5000 sf. The supply system for emergency purposes for buildings totaling 5000 sf or greater, in addition to the normal services to the building and meeting the general requirements of this section, shall be the type of system described by 700.12 (B). This requirement shall not prohibit the use of the supply systems 700.12 (A), or 700.12 (C) through (F), for buildings totaling 5000 sf or greater, if these systems are required for safety purposes and if these systems are automatically connected to a Generator Set as described in 700.12 (B)." [The balance of section 700 is unchanged.]

Modify paragraph 701.11 Legally Required Standby Systems of the NEC to:

"Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, legally required standby power will be available within the time required for the application but not to exceed 20 seconds. The supply system for legally required standby purposes for buildings totaling less than 5000 sf, in addition to the normal services to the building shall be permitted to comprise one or more of the types of systems described in 701.11(A) through 701.11 (F). Unit equipment in accordance with 701.11(G) shall satisfy the applicable requirements of this article for buildings totaling less than 5000 sf. The supply system for legally required standby purposes for buildings totaling 5000 sf or greater, in addition to the normal services to the building shall be required to be the type of system described by 701.11 (B). This requirement shall not prohibit the use of the supply systems 701.11 (A), or 701.11 (C) through (G), for buildings totaling 5000 sf or greater if these systems are required for safety purposes and if these systems are automatically connected to a Generator Set as described in 701.11 (B)." [The balance of this section is unchanged.]

The Director of DFCM may authorize battery packs in suitable applications when the standard is not achievable due to the unique circumstances of a particular project or the constraints of the project budget.

# B. Lighting

# **Design Requirements**

Occupants within an enclosed space shall have the capability to adjust the lighting within the enclosed space.

Light Pollution Reduction: Comply with Light Pollution Reduction requirements, unless otherwise directed by the DFCM's Designated Representative.

Comply with the Illuminating Engineering Society of North America (IESNA) Recommended Practice Manual: "Lighting for Exterior Environments (RP-33-99)." Provide exterior luminaires which are shielded. For luminaires with more than 3000 initial lamp lumens, provide Full Cutoff (IESNA Classification) luminaires. Interior lighting shall be positioned so that the maximum candela value does not fall outside the interior space, such as out through a window. Exterior lighting shall be located so that the maximum candela value of all exterior lighting shall fall within the property. Provide shielding for any luminaire within a distance of 2.25 times its mounting height from the property boundary so that no light from the luminaire illuminates past the property boundary.

<u>Lighting Fixtures</u>. Provide lenses that will not yellow due to exposure to sunlight or to the light sources in the fixture. When acrylic diffusers are specified, provide 100% virgin acrylic. Provide electronic ballasts, except that magnetic ballasts may be used in outdoor applications. Provide program start ballasts, if available for the lamp type. Connect equipment grounding conductor to fixture housing. Provide a 10% spare lamps, diffusers or glass for each light fixture type with not less than one for less than 10.

<u>Interior Lighting</u>: Provide T-8 lamps in fixtures, except for areas requiring special lighting. Provide independent safety-wires attached to structure at two diagonal corners of lighting fixtures in compliance with seismic requirements. For recessed fluorescent fixtures that are removable, locate outlet box with 3' of steel flexible conduit to the fixture to aid in removing and relocating fixture.

<u>Exterior Lighting:</u> Provide -10 degree F. ballasts, either constant wattage or pulse start. Provide break-away fuse for all phase conductors for all outside pole mounted lighting fixtures. Provide a shorting fuse insert for neutral fuse holder. Do not use common neutral multi-wire circuits for this type of lighting.

<u>Reflected Ceiling Plan Coordination</u>: Coordinate the lighting fixture with the reflected ceiling plan for lay-in and surface mounted fixtures. Recessed lighting fixtures in acoustical tile ceiling shall be located centered on a single tile or at the intersection of four tiles.

<u>Lighting Fixture Supports:</u> Provide swivel bases for stems supporting lighting fixture which exceed 12" in length.

<u>HID Sources:</u> Provide Constant Wattage ballasts. For metal halide, provide Pulse Start Metal Halide lamps and ballasts. For indoor, provide pulse start electronic ballasts. For outdoor up to 200 watts, provide pulse start electronic ballasts. For outdoor above 200 watts, provide magnetic ballasts if control, noise, and flicker requirements are satisfied.

# C. Raceways to 600 V

# **Design Requirements**

Raceways, Fittings, and Boxes. Provide steel raceway, fitting, and box system for all wiring, except that plastic conduit (minimum schedule 40) may be installed underground and aluminum cable trays may be installed for communications cabling. For steel raceway installed in contact with soil, provide rigid or IMC PVC coated or wrapped raceways, fittings, etc. Provide steel raceways for penetrating structural elements (minimum 10' each side) and rigid steel conduit (PVC coated or wrapped) for bends greater than 22 degrees. Provide minimum 3/4" raceways, except ½" may be provided for HVAC Instrumentation and Control. For Communications raceway, the bend must be a minimum 6 times the diameter for sizes 2" or less and 10 times the diameter for larger then 2". Provide flexible steel conduit (minimum ½") in short lengths where movement, vibration, misalignment or cramped quarters exist. Provide insulated throat or equal type plastic bushings for box connection 1" or larger. Provide double lock nuts and plastic bushings for IMC and rigid conduit. Provide liquid-tight flexible conduit with approved moisture-tight fittings for wet, humid, corrosive or oily locations. Provide a minimum 18" liquidtight flexible conduit at each motor. Provide minimum 4/s box 1-1/2" deep with plaster rings, except provide 3-1/2" deep masonry boxes for masonry. For boxes with 3 or more raceway entrances, provide minimum 2-1/8" box. For boxes with 4 or more raceway entrances, provide 4-11/16" boxes (except for masonry boxes). Provide gang boxes for multiple gang installations. Provide accessible junction boxes in interior raceway runs at minimum 100 foot intervals. Provide minimum 12" clearance from hot water and steam lines measured from outside of

insulation.

<u>Electrical Supports.</u> All raceways, boxes, and conductors shall be supported independently from all other electrical or mechanical systems, directly from building structure by a listed supporting device. Provide bracing parallel to trusses, beams, joist, bridging, etc. Provide anchors capable of supporting 4 times the weight of the unit supported, but not less than 100 lbs. For ceiling fixture outlet boxes, provide minimum supporting capacity of 200 lbs and a standard 3/8" stud. Provide outlet boxes with rigid support using metal bar hangers between studs. Provide concrete pads 6 inches beyond the largest dimension of the equipment. Extend equipment pad a minimum of 4" above finished floor or grade.

Steel Raceway Supports. Provide minimum of 2 supports per ten foot length; Support within 12 inches of bends, couplings, fittings and boxes, minimum of two straps per ten foot length. For 2 runs or less of 3/4" to 1-1/4" raceways, provide supports with full straps, clamps or hangers. For individual run 1-1/2" or larger raceways, provide supports with hangers. All other raceways, support with trapeze mounting channels.

<u>Future Raceways:</u> Provide five capped spare <sup>3</sup>/<sub>4</sub>" conduits from each section of a branch panelboard into the ceiling and floor space. If the floor space is not accessible, provide an additional <sup>3</sup>/<sub>4</sub>" conduit from each section of a branch panelboard into the ceiling. Provide 200-lb nylon pull cord in all empty conduit, then cap raceway using a blank cover similar to adjacent wiring device covers.

<u>Underground Raceway Identification and Installation:</u> Provide direct buried conduit in an area outside a building not less 24" deep, with magnetic "yellow warning" ribbon 12" directly above and 6" below finished grade measured from the top of the conduit or duct bank.

# Do not provide the following, unless approved by the Director:

Exposed cable wiring.

Other raceway systems: Electrical Non-metallic Tubing, aluminum conduit, die cast fittings, steel cable trays.

### D. Conductors

# **Design Requirements**

Conductors. Provide minimum #12 copper conductors with 600 V insulation (THW, THWN, THWN-2, XHHW, or XHHW-2) for all phase conductors; unless ambient conditions require an increased insulation rating. Do not parallel less than #1/0 conductors. Do not feed conductors through one section of panelboard to connect to an overcurrent device in another section of panelboard. Provide separate neutrals for all GFI circuit breakers and for the load side of feed thru GFCI outlets. Provide minimum 12" clearance from hotwater and steam lines measured from outside of insulation.

Do not provide the following, unless approved by the Director:

Exposed cable wiring.

<u>Splices</u> in panelboard, switchboard enclosures, or in conduit bodies.

Other cabling methods: Non-metallic sheathed cables (Romex), Metal Clad Cables, aluminum conductors.

# E. Grounding

# **Design Requirements**

Grounding. Ground all medium voltage equipment and exposed metals in the immediate area with the neutral conductor of the primary cable and with a minimum 5/8" X 10' ground rod. Provide grounding electrode system at the service entrance with, at a minimum, two of the following electrodes as defined in the NEC: metal underground water pipe, concrete-encased electrode, or ground ring. In addition, bond to other available electrodes. Provide a separate green grounding conductor enclosed with phase conductors in all raceways on the load side of the service entrance. Provide grounding bushings for all service raceways and for raceways installed in concentric/eccentric knockouts. All grounding systems shall be interconnected and/or bonded to the grounding electrode system. Upgrade as necessary existing electrical systems to comply with the NEC and these requirements.

# F. Medium Voltage

# **Design Requirements**

Medium Voltage Conductors: Provide copper conductors with copper tape shields and EPR insulation and 100% copper neutral in Medium Voltage Ductbanks; or, in utility tunnels or other areas without public access, provide armored cable or rigid conduit. Comply, as a minimum, to the installation requirements for Medium-Voltage Cable standard NECA 600-2003. Perform Hi-Pot test after terminations have been made, but before connections have been made to buses or apparatus. Perform continuity tests of all cables after entire installation and terminations have been completed. If a cable fails to perform, replace faulty cable and retest. All tests will be recorded and submitted with M & O manuals at project conclusion.

Medium Voltage Duct Banks. For interior of buildings in non-public areas, provide rigid galvanized conduit or armored cable marked with red HIGH VOLTAGE. For exterior applications or public areas, provide concrete encased duct-banks (red dye) with raceways in multiples of two and a minimum of one spare conduit (with polypropylene pull wire) per feeder. Provide rigid metal conduit for the first 10 feet of duct bank from a facility or manhole. Provide minimum 4" raceway.

<u>Medium Voltage Transformer</u>: A/E shall design harmonic mitigation to reduce current total harmonic distortion (based upon full load capacity of the transformer) below 5%. Provide copper or aluminum windings. Provide transformer taps and adjust voltage output to obtain the proper value. Provide primary and secondary terminations at medium voltage transformers, cable, splices, etc. necessary to complete installation. Do not use Askarel transformers.

<u>Lightning Protection</u>: Provide lightning (surge) arresters for medium voltage transformers and switchgear located above ground outside.

# G. Controller

# **Design Requirements**

Motor controllers: Provide NEMA rated magnetic motor controllers with thermal overload relays for each phase. Provide auxiliary contacts, HOA switches or start-stop pushbuttons as appropriate, stop and run pilot lights, and reset pushbuttons. Provide fused control transformer in the starter for 120 V control. Provide safety interlock to prevent opening enclosure with equipment or control energized.

Variable Frequency Controllers: Provide PWM variable frequency controllers suitable for the application, factory pre-wired with integral disconnect, input filter, and integral ventilation. Coordinate approved manufacturers with the Agency. Provide interface to HVAC or Building Automation System for control. For interior VFCs, size ventilation for ambient temperature of 32 degrees F. to 90 degrees F. Avoid exterior mounted VFCs; but, if required, provide ventilation for ambient temperatures from -30 degrees F. to 120 degrees F. Fault current rating shall be sized based upon the fault current analysis of the nearest upstream overcurrent device. Include factory startup and tune to optimize life of motor. Provide VFCs which operate within the following normal ranges of inputs: +/- 10% input voltage; +/- 5% input frequency; less than 7% voltage THD. Provide VFCs which operate through voltage sags of 0% voltage for 1 cycle and 60% voltage for 10 cycles. For Motors 7.5 hp and larger, provide a minimum power quality performance of 12% current THD and 3% voltage THD at filter or VFC input by providing a broadband type filter or minimum 12 pulse VFC complying with the power quality performance requirements demonstrated by standard factory published data. For Motors less than 7.5 hp, provide AC Line Reactor or DC Link Reactor. For VFC output filtering, provide output filter if drive output at motor termination exceeds pulse-withstand capability. Provide 95% efficiency minimum including filter and 95% power factor. Provide local speed control, HOA switch, remote start/stop, external safeties, run annunciation, fault annunciation, and speed reference input connection. For maintenance purposes, provide stable operation including starting, stopping and running with the motor completely disconnected; provide auto restart after a power failure; provide capability for starting into a rotating motor at any speed.

Provide a manual bypass of UFC as part of controller.

Do not provide the following components, unless approved by the Director.

Other Electrical Components: IEC motor controllers.

# H. Electrical Distribution

# **Design Requirements**

Overcurrent and Ground Fault Protection: Set overcurrent and ground fault protection based upon Fault Current Protection and Coordination Study prepared by the A/E.

Submit study with M & O manuals.

<u>Transformers:</u> Provide transformers with copper conductors. Provide transformer taps of 4 taps – 2.5% above normal and 2 taps – 2.5% below normal. Adjust voltage output to obtain the proper value at the main disconnect.

Metering: Provide secondary digital metering (including demand monitoring) at the main distribution panel(s) in each facility. For secondary digital metering for facilities greater than 800 Amps include harmonic monitoring and an option for building automation monitoring or other remote monitoring. Indicate multiplying factor on meter face where current transformers are used.

<u>Utility Metering:</u> Comply with serving utility's regulations, if applicable. Comply with utility's metering requirements. Include cost assessed by serving utility.

<u>Switchboards and Panelboards:</u> Provide bus hardware installed on the bus for future over-current devices of not less than 25% minimum. Provide over-current devices in the same sequence as shown on the panel schedules or one-line diagrams. Coordinate that the height of the operating handle of the over-current device does not exceed 6'6" above the floor. Identify main over-current protection devices.

<u>Panelboards</u>: Provide listed panelboard construction for all branch panels and circuit breaker distribution panels. For 3 phase 4 wire delta systems, connect Hi-Leg to center bus. Provide ground bus bonded to enclosure to terminate all equipment ground conductors. Include insulated ground bus for insulated ground circuits. Key all panelboards alike and provide 3 keys.

<u>Circuit Breakers:</u> Provide one, two or three-pole over-current devices with common handle (not field modifiable). Provide bolted connections.

Do not use the following components, unless approved by the Director:

Other Electrical Components: load centers, plug-in circuit breakers.

### I. Miscellaneous Electrical

# **Design Requirements**

<u>Lighting Contactors</u>: Provide NEMA rated lighting contactors with HOA.

Wiring Devices: Locate switches so as not to exceed 48" to the bottom above finished floor. Except for floor boxes, locate convenience outlets so that outlet is not less than 18" to the bottom and not greater than 48" to the top above finished floor. Coordinate heights with cabinetry and finishes. Use feed through GFCI outlets only if the outlet served is located in the same room. Convenience outlets (120 V) and switches (120/277V) shall be minimum 20A self-grounding with nylon faces and cover plates. Coordinate device colors and plates with the finishes. Provide industrial raised covers for surface switches and outlets. Arrange devices in gangs if multiple devices are located at the same location. Provide mounting strips and blank cover-plates for outlet boxes without devices. Do not connect more than eight (8) convenience outlets on each 20A circuit.

<u>Lightning Protection:</u> If the risk analysis performed per NFPA 780 exceeds moderate risk, provide a lightning protection system. Minimum qualifications required: LPI-certified installer, designer, and inspector. Obtain a UL Master Label for the facility.

# Power Quality:

A/E shall include in the Basis of Design an evaluation of the potential harmonic risks to the electrical distribution system and the approach to mitigate the risks to transformers, neutral conductors, and other equipment.

Design TVSS for the main service of each facility with services greater than 200 A. Include a second level of TVSS for panelboards serving primarily computer or other electronic equipment.

Specify harmonic testing of each transformer (voltage and current THD) after the facility is occupied to determine effectiveness of the Power Quality approach.

<u>Hazardous Classifications</u>: Coordinate with Fire Marshall hazardous classifications and requirements, including class, division, and group requirements.

Generator Fuel Tank Size: Size fuel tank to comply with Code requirements and facility needs. Allowance shall be made in the capacity so that there is adequate fuel to comply with these requirements when the tank indicates that it needs to be refilled. Provide a minimum tank capacity for 24 hour continuous operation.

# J. Structured Cabling

# **Design Requirements**

Test all structured cablings systems to demonstrate compliance with TIA/EIA standards for the category of system selected. Include warranty and the test results in the Project Resource Manual.

# K. Fire Alarm

# **Design Requirements**

Provide addressable fire alarm systems. Install class "A" looped systems or as approved by Fire Marshal.

Do not use the following components, unless approved by the Director.

Other Fire Alarm Components: Zoned Fire Alarm panels, ionization smoke detectors.

# L. Misc. Systems

Determine requirements for other systems such as security, cctv, etc.

# 3.7 LANDSCAPING

# A. Irrigation Water

# **Design Requirements**

Reduce life cycle costs by requiring the A/E to design state-owned buildings to comply with the following:

Water Allowance for Landscape Irrigation			
Type	Facility Type	Water Allowance	
Α	Office Buildings	.5	
В	Existing campus/institution	.7	
С	New campus/institution	.6	
D	Recreation areas (ball fields, etc.)	.7	
Е	State Parks (natural areas)	.1	

The annual Landscape Water Allowance shall be calculated using the following equation: Landscape Water Allowance (gal) = ET x PF x (Area/IE) X.62. Where Landscape Water Allowance is in gallons per growing season: ET = Reference Evaportranspiration in inches per growing season; PF = Plant Factor (see chart below); Area + total Irrigated Landscape Are in square feet; IE = irrigation efficiency (see chart below); .62 = conversion to gallons.

Plant Factor (PF)				
Plant Type	Plant Hydrazone	Plant Factor (PF)		
Turf	3+	1.0		
Non-drought tolerant trees, shrubs and	2-3	.7		
ground cover				

Water-conserving trees, shrubs and	1-2	.5
ground cover		
Extra drought-tolerant trees, shrubs and	0-1	.2
ground cover		
Mulch areas not irrigated	0	0

Irrigation Efficiency			
Irrigation Type	Irrigation Efficiency		
Bubblers	.85		
Drip Emitters	.85		
Stream Sprinklers in planter strips 8 feet or wider	.75		
Spray Sprinklers in planter strips 8 feet or wider	.625		
Spray Sprinklers in planter strips less than 8 feet wide	.4		

All splices below grade are to be approved for wet locations.

Comply with the "Minimum Standards for Efficient Landscape Irrigation System Design and Installation", Current version of the Utah Irrigation Association. Refer to <a href="https://www.utahia.org">www.utahia.org</a>

#### B. Plant and Soil

# **Design Requirements**

Comply with the following:

Top Soil Quality Guidelines for Landscaping, refer to <a href="www.usu.edu/files/agpubs/topsoil.htm">www.usu.edu/files/agpubs/topsoil.htm</a>
USDA Hardiness Zones, refer to <a href="http://www.usna.usda.gov/Hardzone/index.html">http://www.usna.usda.gov/Hardzone/index.html</a>
TPI's "Specifications for turf grass sod materials" and "Specification for Turf grass sod transplanting" and installation in its "guideline specifications to turf grass sodding"
Utah Water-Wise Plants, refer to <a href="http://extension.usu.edu/files/gardbids/hg500.pdf">http://extension.usu.edu/files/gardbids/hg500.pdf</a>,
<a href="http://extension.usu.edu/files/gardbids/hg500-2.pdf">http://extension.usu.edu/files/gardbids/hg500-2.pdf</a>,
<a href="http://extension.usu.edu/files/gardbids/hg500-3.pdf">http://extension.usu.edu/files/gardbids/hg500-3.pdf</a>

# Do not use the following components, unless approved by the Director.

Other Plant Materials: Plant materials not complying with the Utah Water-Wise Plants and complying with USDA Hardiness Zones.

# SECTION III - APPENDIX F This Appendix contains the DFCM Design Process.



# **Division of Facilities Construction and Management**

# DESIGN PROCESS

# **PREFACE**

In order for the Division of Facilities Construction and Management (DFCM) to be one of the nation's premier facility construction and maintenance managers, it is essential that we consistently provide the best value in the facilities that serve the citizens of the State of Utah.

# **DESIGN PROCESS**

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# **DESIGN PROCESS**

# 1.0 GENERAL

#### 1.1 General

- A. The Design Process applies to the capital development and capital improvement activities of DFCM. It contains specific information for the preparation of contract documents administered by the Division of Facilities Construction and Management. It delineates and supplements (either directly in the document or indirectly by reference) codes, industry recognized standards, and guide specifications. Many of the criteria are based upon the experience of DFCM and the input of professional and industry representatives.
- B. Each entity which has a contract with DFCM will be evaluated on its performance in accordance with the Design Process which includes both self-performed work and the performance of its subconsultants. As a result, it is critical that the A/E, which is in contract with DFCM, communicate to its subconsultants the requirements of the Design Process and that the subconsultants communicate to the A/E and DFCM any deviations from the Design Process.

#### 1.2 Related Documents

- A. The Design Process (refer to http://dfcm.utah.gov/) includes the following documents which are incorporated herein by reference:
  - 1. Programming Standards documents requirements for Facility Program documents. Refer to <a href="http://dfcm.utah.gov/">http://dfcm.utah.gov/</a>
  - 2. Design Requirements documents DFCM requirements which have resulted from DFCM's expertise and experience from previous projects. Refer to http://dfcm.utah.gov/
- B. DFCM incorporates by reference Codes, Standards, Rules, and Regulations in the Design Requirements document.
- C. Date of Applicable Documents
  - 1. The date of the applicable Design Process, Regulatory, and Standards documents shall be defined as follows:
    - a. For the facility program, this date is usually the scheduled end date for completion of the Facility Program;

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b. For the facility design and construction, this date is usually the date of the design contract.

#### 1.3 Communication

A. DFCM's Designated Representative shall arrange for implementing an effective process for communicating with Agency for the purposes of determining facility requirements, Agency's inquiries, and concerns related to the project.

# 1.4 Conflicts, Exclusions, Omissions, and Revisions

# A. Conflicts

- 1. In case of conflict between any of the provisions of the Design Process and other requirements, the most stringent requirement shall govern.
- 2. In cases where references in the Design Process have changed or are otherwise incorrect, document issues to DFCM's Designated Representative.

# B. Exclusions

- 1. Where any requirement cannot be applied due to project specific requirements that conflict with the Design Process, they will be considered for exclusion. A requirement may be excluded only when the exclusion may not affect DFCM's ability to deliver high quality facilities and does not absolve DFCM, or entities which contract with DFCM, from the responsibility to provide facility realization services that comply with the Design Process.
- 2. DFCM's Designated Representative is responsible for submitting exclusions from the Design Process for a specific project to the Director of DFCM. The Director has the responsibility and authority for examining whether the proposed exclusions are appropriate and for approving them.

# 2.0 PROJECT SPECIFIC REQUIREMENTS

# 2.1 Image to Public and Occupants

# A. General

1. The facility shall be economically efficient considering the function to be performed and the life expectancy of the structure.

- 2. Provide facilities that are aesthetically compatible with the function and importance of the facility. Obtain permission from DFCM's Designated Representative to expose facility components which detract from the aesthetic quality of the facility.
- 3. Review aesthetic features, which are defined as architectural elements other than finishes that are not required for the facility to function efficiently for the Agency, with the DFCM's Designated Representative. Examples of aesthetic features are: atriums, fountains, skylights, spaces with excessive volume, and exterior free standing architectural elements.
- 4. Honor the context of the site.
- B. Appearance and Image of the Facility
  - 1. Determine, with the DFCM's Designated Representative, the required appearance and image of the facility.

Appearance and Image of the Facility		
Facility Category	Materials, Finishes, and Entry	
Prestigious Facility: highly regarded by most	The materials and finishes are prestigious and	
people and very welcoming to visitors and	the best available. The approach and entry have	
staff.	convenient access and many welcoming	
	features and enhancements.	
Above Average appearance: regarded as	The materials and finishes are above average	
attractive, clean, and welcoming to visitors and	quality for the community. The approach and	
staff.	entry are above average and have some	
	welcoming features and enhancements.	
Average appearance: basically clean with	The materials and finishes are of a quality	
approaches and entrances that project a	usually found in the community. The approach	
standard image.	and entry present a standard appearance of an	
	office building.	
Overall appearance of the facility and of the	The materials and finishes are of a quality	
entrance is of minimum significance.	usually found in industrial facilities. The	
	approach and entry present a standard	
	appearance of an industrial building.	

# 2.2 Budget

- A. Provide Design Services that do not exceed the project budget in the Agreement with DFCM.
- B. The project budget, which must not be exceeded in order to have a successful project, is established prior to the commencement of the design of the project.

1. In projects where the services of an A/E are procured, the A/E with DFCM shall develop a cost model within the budget for the construction of the project. The different portions of the cost model will be assigned to the A/E and the Design Subconsultants for identifiable elements of the project. Refer to the Cost Model Requirements for additional requirements.

# C. Alternates

- 1. Obtain approval from DFCM's Designated Representative for any alternates prior to advertisement. Do not exceed six alternates, unless approved by DFCM's Designated Representative.
- 2. Describe completely all bidding alternates.
- 3. Do not increase the scope of the original project with alternates.
- 4. Specify only additive alternates and only with the intent of keeping the project within the construction budget.
- 5. Do not include in an alternate work which is an integral part of the project.

# 2.3 Schedule

- A. Provide Design Services that are completed on schedule as documented in the Agreement with DFCM for the specific project.
  - 1. Written approval of any changes in the schedule is required from DFCM's Designated Representative.

# 2.4 Agency Related Requirements

- A. Provide Design Services, within the constraints of the Design Process and other DFCM specified constraints, which meet requirements specified by the Agency, requirements not stated by the Agency but which are necessary for the intended use, statutory and regulatory requirements, and additional requirements specified by the participants in the Facility Program (if one is prepared).
  - 1. Minimize the disruption of the Agency's mission.
  - 2. Provide a facility that has a reasonable degree of flexibility to permit future reasonably foreseeable changes in use.

# 3.0 REGULATORY, STANDARDS, AND DFCM REQUIREMENTS

#### 3.1 General

A. Document in the Basis of Design the assumptions utilized in the design, including codes and other regulatory requirements (including dates and amendments), consensus based standards, and DFCM requirements.

- B. Comply with all applicable laws, rules, and regulatory requirements. Regulatory requirements include (but are not limited to) the documents referenced in the Design Requirements.
  - 1. A/E shall be responsible to submit the Contract Documents and obtain approval from all Authorities Having Jurisdiction.
- C. Utilize design practices and provide facilities (including products and services incorporated into facilities) that comply with current editions of consensus based standards.

# 1. Exceptions

a. If a proposed system is not designed in accordance with a consensus based standard, notify the DFCM's Designated Representative. This requirement provides DFCM the opportunity to determine whether the risk of an option that does not comply with a consensus based standard is acceptable.

# 4.0 PROJECT PROCESS

# 4.1 General

- A. This section defines, in general, the stages in the facility life cycle based upon the Construction Specification Institute's Project Resource Manual. The DFCM's Designated Representative has the flexibility to adapt or combine stages to the needs of the project subject to DFCM processes and procedures.
- B. Meeting Requirements
  - 1. The A/E shall be responsible for arranging for meeting agendas and meeting minutes.
  - 2. Meeting Minutes
    - a. Record attendance, document action items, and document distribution of the meeting minutes. Action items include project related direction given to any project participant during the meeting or prior to the meeting which has not been documented.

# C. Documentation Requirements

1. DFCM encourages document submittals to be submitted in digital pdf format; however, provide paper copies in accordance with agreements and as required to fulfill requirements. Copies in digital format may be

transmitted by email, except for copies which shall become a permanent record which shall be submitted in DVD format.

- 2. Permanent Record Documents include:
  - a. System Selection
  - b. Schematic Design
  - c. Design Development
  - d. Contract Documents
- 3. Digital Documents in pdf, DWG, DGN, DOC, XLS, and similar formats.
  - a. Documentation of Virus Free Format: Virus Scanning Software, Version, Date; Scan Date.

# D. Verification

- 1. DFCM expects that each project task can be completed right the first time. In order to meet this expectation, the goal is to eliminate nonconformity by concentrating the efforts of all participants necessary to contribute to proper planning. Without proper planning, rework absorbs resources that often results in compressing the schedule which can increase costs, cause additional schedule compression, and reduce quality. To avoid rework, DFCM requires that each member of the A/E team is expected to verify that their work is complete prior to submitting it for observation by DFCM or its agents. DFCM's verification process shall not be a substitute for the verification process required by the parties in contract with DFCM and shall not relieve these parties of their responsibilities.
  - a. All participants shall familiarize themselves with the existing site and facility conditions as a prerequisite prior to their participation or presentation of a proposal. If the participant does not comply with this prerequisite, changes in the participant's scope of work that could have been avoided by compliance with this prerequisite shall not be accepted.
  - b. Notwithstanding this expectation, it is understood that the planning, programming, and design services develop through an iterative process; however, it is expected that the deliverables required at each phase of the process shall be substantially complete prior to obtaining approval of DFCM's Designated Representative to proceed to the next phase of the process. The reason for this requirement is to avoid compressing the schedule which contributes to poor quality. Major changes in approved documents shall be avoided and require approval of the DFCM's Designated Representative.

- E. Validation. The A/E shall fully cooperate in providing information required to validate the design.
  - 1. DFCM may validate, or arrange to have validated, that the work process and the facility complies with the Design Process, the Facility Program (if prepared), and other Agency Design Criteria. Refer to the related documents for Design Requirements.
  - 2. DFCM may arrange for the validation of the Structural Design by a Structural Engineering Peer Review. The Structural Engineering Peer Review shall be performed by a Utah registered SE experienced in similar project types.
  - 3. DFCM may arrange for the validation of the Energy Design for conformance with DFCM's energy conservation requirements by a Utah Professional Engineer specializing in mechanical engineering.
  - 4. DFCM may arrange for the validation of the Irrigation Design for conformance with DFCM's water conservation requirements by a certified Landscape Irrigation Auditor.

# 4.2 Project Conception Stage

- A. All DFCM projects start off as a need statement. The need statement can be as short as a few paragraphs, or it can evolve into a full program document. During this phase the scope and budget for the project are established. The program or needs statement is the guide to follow as the design progresses.
- B. DFCM shall assemble a steering committee which includes the appropriate representation from DFCM and the Agency to provide guidance to the design team throughout the process.
- C. DFCM shall allocate the funding in accordance with its procedures and prepare a schedule documenting the major milestones for the funded portions of the project. DFCM shall define project quality by requiring compliance with the Design Process and other specific requirements necessary for project success.

# 4.3 Project Delivery Stage

- A. DFCM shall determine the project delivery method and selection procedures. The project delivery method gives direction to the design process. Each delivery method brings with it a different set of expectation and requirements.
- B. Construction Delivery Methods:
  - 1. Construction Management/General Contractor (CM/GC): This method of construction is the preferred construction delivery method for the

development projects. The CM/GC assists the A/E by preparing a project schedule, cost estimating the designs presented at the different stages and different systems/components as required. The CM/GC also provides input on materials selected for availability, cost and constructability. The preferred method of design in this delivery method is the Single Bid Procurement as described below. An alternate to the single bid package is Multiple Bid Procurement.

- 2. Design-Bid-Build: The basis of this delivery method is that design is completed prior to selection of the contractor. Design is completed using the Single Bid Procurement process.
- 3. Design-Build: DFCM contracts with a single-entity for the complete design and construction of a project. The selection of this delivery method requires approval of the Director. Either the Single Bid or Multiple Bid Procurement methods are acceptable in this construction delivery method.

# C. Design Delivery Methods

- 1. Single Bid Procurement: Design is complete for each A/E and the contract documents are issued in a single bid package.
- 2. Multiple Bid Procurement: "The Building Official is authorized to issue approval for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code." The project is separated into two bid packages. Construction can start while the remaining design elements are completed. Design Development shall be completed for all disciplines prior to issuing contract documents for any early bid package. The two bid packages are:
  - a. Site Grading, Utilities, Footings, Foundations, Core and Shell Bid Package: Includes all documents necessary for demolition, relocation, and construction of site utilities, including site grading, overall building layout, excavation, and structural elements for the primary structural framing system, stairs, elevators, major mechanical and electrical equipment and exterior skin. The A/E documents shall include final overall building dimensions including slab edges, slab openings, and all information necessary to prepare the structural shop drawings.
  - b. Final Bid Package: Includes contract documents for all other elements to be incorporated into the project.

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# 4.4 Design Stages

Note: If the project is small and uncomplicated the different design stages may be combined with approval of the DFCM Designated Representative.

#### A. Definitions:

- 1. "Basis of Design" Basis of Design and Assumptions for each Design Discipline. This document conveys the essence and important features of the project along with the different options for each of the systems. The document should contain information such as square footage, space efficiency and comparisons with the program requirements. Include a description of any additional spare capacity included in any of the engineered systems. Summarize the codes that will apply and submit a code analysis.
- 2. "Cost Model" This document refers back to the Basis of Design document and informs the steering group about the cost implications of the different systems. The Cost Model must include appropriate contingency for undocumented design issues.

# B Expectations of Design Team.

- 1. DFCM expects that the A/E, together with its subconsultants, have responsible charge of the Design. The A/E shall designate the person who is in responsible charge of a specific design service for a specific project and through a qualification's process assure DFCM that the person is qualified legally and by experience to perform the specific design service. This designated person shall be the primary day to day contact for the discipline throughout the project.
- 2. The goal is a quality coordinated design that minimizes the need for RFI's or change orders, and achieves a high value for cost. It is necessary that drawings, notes, and specifications be coordinated so as to minimize conflicting provisions. A design that relies upon a preponderance of vendor expertise and design effort, generally, will not accomplish this goal. Include the necessary expertise in your A/E team. Obtain permission from DFCM for the use of any performance specifications which do not show the extent of the work on the drawings and which are significantly a product of vendor input. Coordinate all work between disciplines.
- 3. DFCM may utilize the services of an independent commissioning agent. The A/E shall coordinate with the selected commissioning agent to incorporate the commissioning requirements in to the specification. The commissioning agent shall provide the information that must be included in the specification. The goal of the commissioning agent is to focus on key systems identified with DFCM that, from past experience, have been

problematic. The commissioning agent validates that the key systems will comply with the Design Process, DFCM's Project Constraints, and the Basis of Design at each phase of the project after their services have been procured.

- C. DFCM has established cover sheets for the drawings for each design phase. These are available through the DFCM web site. Utilize these cover sheets for each submittal phase to DFCM.
- D. System Selection Design Phase
  - 1. In the System Selection Design phase (at approximately 50% to 75% completion of Schematic Design), the A/E shall confirm the facility program requirements defined in the facility program document or as otherwise defined by DFCM.
  - 2. The A/E shall document its Basis of Design including any design assumptions, and confirm the assumptions with the authorities having jurisdiction, the Agency and DFCM.
  - 3. The A/E shall provide the steering committee with system options and evaluate the impact of each. Adjust the allocation of resources within the cost model, without exceeding the budget, based upon the direction from the steering committee. Obtain mutual agreement in order to proceed.
  - 4. System Selection Submittal Requirements:
    - a. Written Requirements:
      - (1) Basis of Design
      - (2) Cost Model with system narratives for each option.
    - b. Drawings Requirements
      - (1) Use the DFCM provided cover sheets and input the required information.
        - (a) Other Drawing Requirements
          - Plan North/True North Symbol: Show on all plans in the lower right hand corner of the drawings.
          - Plan Orientation: Orient plans consistently throughout the set of drawings.
          - Graphic Scale: Show graphic scale for all drawings or views.

- (b) Comprehensive List of Sheets
- (c) General Sheets

# (2) Civil

(a) Civil Drawings: should include information on such items as existing benchmarks, lot lines, distance from existing buildings, existing and new utility lines and proposed footprint of the new structure.

# (3) Landscape

(a) Potential landscape areas.

# (4) Architecture

(a) Architectural Drawings: should include floor plans and room names, exit pathways and exterior rough elevations to show the essence of the building material types.

# (5) Structural

(a) Structural Drawings: should include basic information on grid lines, bay spacing and locations for lateral force resisting elements.

# (6) Mechanical

(a) Mechanical Drawings: should include basic information on system locations, connection points and utility sizing and capacity.

# (7) Electrical

(a) Electrical Drawings: should include basic information on system locations, connection points and utility sizing and capacity.

# (8) Communications

(a) Communications: should include basic information on system locations, connection points and utility sizing and capacity.

# E. Schematic Design Phase

- 1. Continue to develop and refine the system selection requirements.
- 2. In the Schematic Design phase, the A/E documents the general extent, scale, and relationship of the project components, the type of construction and incorporates the systems selected in the previous phase.
- 3. The A/E shall be responsible to communicate with the State Fire Marshall's Office to receive any direction required to move to the next phase of design.
- 4. Schematic Submittal Requirements:
  - a. Written Requirements.
    - (1) Updated basis of design and assumptions for each Design Discipline
    - (2) Updated Cost Model
    - (3) Project Manual (refer to CSI Project Resource Manual)
  - b. Drawing Requirements. Continue to refine the previous drawings and add the following information.
    - (1) General
      - (a) Key Plans: show key plans on all drawings where one element requires two or more drawings to delineate a level.
      - (b) Column Grid Lines: show on all views, except that they may be omitted on Civil, Landscape and Site Plans.
    - (2) Civil
      - (a) Symbol Legend and Abbreviation List
      - (b) Site Demolition Plans
      - (c) Civil Site Utilities Plans
      - (d) Civil Utility Profiles
      - (e) Civil Utility Sections
      - (f) Civil Utility Details and Notes
    - (3) Landscape
      - (a) Concept landscape areas.

# (4) Architecture

- (a) Symbol Legend and Abbreviation Lists
- (b) Roof Plan
- (c) Floor Plans
- (d) Penthouse roof plan: Show on the same drawing if possible. Skylights.
- (e) Exterior Elevations
- (f) Sections

# (5) Structural

- (a) General Structural Notes/Design Criteria
- (b) Foundation Plans and Slab-On-Grade Plans
- (c) Floor and Roof Framing Plans

# (6) Fire Protection

(a) Symbol Legend and Abbreviations List

# (7) Mechanical

- (a) Mechanical Plans
- (b) Mechanical Equipment Schedules (Boiler, Chiller, Cooling Tower, Air Handlers, etc.)

# (8) Electrical

- (a) Lighting (Area, Horizontal IES category, Horizontal IES task illuminance, Design Issues): Site Lighting (Area, Illuminance, Design Issues).
- (b) Power Quality {Design (%), Design Approach}; Neutral Conductor sizing for non-linear loads (Type, Design Approach).
- (c) Symbol Legend and Abbreviations
- (d) Electrical Site Plan
- (e) Electrical Power Plans
- (f) Electrical Schedules and Diagrams

# (9) Communications

- (a) Structured Cabling Plans (Tt-1nn)
- (b) Other Submittals

# F. Design Development Phase

- 1. Continue to Develop and Refine the Schematic Design Requirements
- 2. After written approval of Schematic Design has been obtained from DFCM's Designated Representative, the A/E shall proceed with the design development phase of the project upon receipt of written confirmation to initiate the next phase of design. The design development phase fixes and describes the size and character of the entire project. In order for the project design to be considered successful, only minor modifications to the location of the facility on the site, the floor plans, and facility sections should be required during the Construction Documents Stage.
- 3. The A/E shall be responsible to communicate with the State Fire Marshall's Office to receive any direction required to move to the next phase of design.
- 4. Design Development Plan Review
  - a. The design professional shall meet with the building official to review the building code requirements of the proposed project.
  - b. A dimensioned site plan with distances to property lines, grades and location of new and existing buildings on the lot.
  - c. Complete code analysis which shall include the occupancy classification, type of construction, allowable area calculations and actual building area, height allowed in feet and stories, sprinkler requirements, exit width required and exit width provided, fire assemblies, and accessibility requirements.
  - d. Elevation drawings showings grades and height of building.
  - e. Typical floor plans
- 5. Design Development Submittal Requirements:
  - a. Written Requirements:
    - (1) Updated basis of Design and Assumptions for each Design Discipline.
    - (2) Updated Cost Model.
    - (3) Project Manual (refer to CSI Project Resource Manual)
    - (4) Code analysis and plan review

- b. Drawing Requirements: Continue to update and refine what was previously shown and add the following information.
  - (1) General
  - (2) Landscape
    - (a) Concept Landscape Areas and Plans
  - (3) Civil
    - (a) Symbol legend and abbreviation
    - (b) Site demolition plan
    - (c) Site plan
    - (d) Grading plan
    - (e) Paving plan
    - (f) Civil site utility plan
    - (g) Civil utility profiles and sections
    - (h) Typical details
  - (4) Architecture
    - (a) Architectural Demolition Plan
    - (b) Layout of existing architectural elements identifying items to be demolished, relocated, or to remain.
    - (c) Building dimensions
    - (d) Floor Plans
    - (e) Roof elevations
    - (f) Exterior building elevations
    - (g) Wall sections
    - (h) Material selections
    - (i) Typical details
  - (5) Structural
    - (a) Classification for fire rated construction
    - (b) Special Inspection
    - (c) Lateral elements
    - (d) Typical details
    - (e) Structural Demolition Plans
  - (6) Fire Protection
    - (a) Fire Detection and Alarm Plans
    - (b) Fire Detection and Alarm Schedules and Diagrams
    - (c) Fire Suppression Details

# (7) Mechanical

- (a) Symbol Legend and Abbreviations List
- (b) Mechanical Demolition Plans
- (c) Equipment schedules
- (d) Single line duct drawings
- (e) Mechanical piping plans
- (f) Plumbing general piping arrangements
- (g) Flow diagrams
- (h) Plumbing fixture schedules
- (i) Large Scale Mechanical Room Plans

# (8) Electrical

- (a) Electrical Large Scale Plans
- (b) Electrical Details
- (c) Electrical Lighting Plans
- (d) Electrical Diagrams and Schedules
- (e) Electronic Security System, General
- (f) Electronic Security Sheets, Plan

# (9) Communications

- (a) Communications Demolition Plans
- (b) Audio Visual Plans
- (c) Audio Visual Diagrams And Schedules
- (d) Structured Cabling Plans, Large Scale Views
- (e) Layout of communication rooms showing all components in the room. Show plan view layout of racks and equipment complying with TIA/EIA requirements.
- (f) Structured Cabling Schedules and Diagrams

# (10) Interior

- (a) Interior Drawings
- (b) Interior Demolition Plans
- (c) Interior Plans

# G. Construction Documents Phase

1. After written approval of the Design/Development Documents has been obtained from the DFCM's Designated Representative, the A/E shall proceed with the construction documents phase of the project. The construction documents are the written and graphic documents prepared or assembled by the A/E for communicating the project design for construction and administering the construction contract. The documents

are reviewed by the authorities having jurisdiction, members of the steering committee, and others selected by members of the steering committee.

- 2. Coordinate requirements for the following items with the DFCM's Designated Representative and assist DFCM as needed.
  - a. Project Identification
  - b. Description of Work
  - c. Type of Bid
  - d. Obtain list of contractors from DFCM's Designated Representative, if applicable.
  - e. Time of Completion
  - f. Liquidated Damages.
  - g. Pre-Bid Meeting
  - h. Evaluation and consideration of bids.
- 3. DFCM will initiate and prepare, with assistance as required from A/E, the following standard documents.
  - a. Notice to Contractors
  - b. Bid Form
  - c. Bid Bond (DFCM)
  - d. Bidder's Proposed Subcontractors (DFCM)
  - e. Contractor Agreement Form (DFCM)
  - f. Payment Bond (DFCM)
  - g. Performance Bond (DFCM)
  - h. Certificate of Substantial Completion (DFCM)
  - i. General Conditions (DFCM)
  - j. Supplementary Conditions
- 4. Construction Documents Submittal Requirements
  - a. Written Requirements:
    - (1) Updated basis of Design and Assumptions for each Design Discipline.
    - (2) Updated Cost Model
    - (3) Specifications: In written form on drawings or separate book, covering the following:
      - (a) Masterformat 2004; all divisions used on project.
      - (b) Material description.
      - (c) Installation description (when not shown on drawings).

- (4) Fault current calculations and coordination study.
- (5) Project Manual: (refer to CSI Project Resource Manual)
  - (a) Energy model report
  - (b) Code analysis
  - (c) Inspection requirement
- (6) Source of Specifications Identified. If A/E incorporates any proprietary specifications or any proprietary portion of its work from a source other than A/E, then such original source must be clearly identified in the A/E's work in order for DFCM to be aware of its identity and to be able to accept or reject such use of said proprietary source. Only those items specifically approved for "sole source" in writing by the Director of the Division of Facilities construction and management may be used as a "sole source" specification. In all specifications, the provision of Utah code, Title 63, Chapter 56, the Utah Procurement code, and all applicable rules enacted pursuant thereto, must be fully complied with the A/E.
- b. Drawing Requirements: Complete, coordinated drawings ready for final review and comment by DFCM, the Agency and Authorities having jurisdiction include the following:
  - (1) Project Title Page: Template provided by DFCM.
  - (2) Seals Page
  - (3) List of Drawing Sheets
- c. The A/E will provide the following documents required for Building Official review and approval.
  - (1) Site Plan.
    - (a) Property description:
      - Written "Legal Description" of property boundaries.
      - Survey information
      - Geotechnical/soils report, stamped, signed and dated by a P.E.
      - Existing hazardous materials information
  - (2) Construction Description Table
    - (a) Use or occupancy
    - (b) Type of construction

- (c) Square footage allowed.
- (d) Actual square footage of proposed structure.
- (e) Height of proposed structure in feet and stories.
- (f) Area increase allowances for:
  - Yards
  - Stories
  - Fire walls
  - Automatic fire sprinkling system
- (g) Occupancy separations
- (h) Means of egress. Show the location, construction, size and character of all portions of the means of egress. Construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.
- (i) Design occupant loads
- (j) Accessibility requirements
- (3) Structural Calculations: Stamped, signed and dated by the engineer of record.
- (4) Fire Assemblies: Detailed on the drawings for walls, floor/ceiling assemblies and roof/ceiling assemblies as per "design number" or "file number" of one of the current publications of the following:
  - (a) Fire resistance tables of Chapter 7 of the International Building Code.
  - (b) "Fire Resistance Directory," Underwriter's Laboratory.
  - (c) "Fire Resistance Design Manual," Gypsum Association.
  - (d) ICC evaluation reports.
- (5) Flood Control/Drainage Drawings: As required, stamped, signed and dated by a professional engineer.
- (6) Special Inspection: The registered design professional in responsible charge shall submit a statement of special inspection. The statement shall include a complete list of materials and work requiring special inspection and the inspections to be performed.
- (7) Performance Based Design: Include any performance based design which has been approved by the building official.

#### H. Contract Documents Phase

- 1. After the construction documents have been modified to comply with requirements of the authorities having jurisdiction and requirements of the steering committee written approval by the DFCM's Designated Representative is required to issue the Contract Documents.
  - a. Provide two complete and corrected sets of drawings. Drawings shall be wet-stamped, signed and dated by a State of Utah licensed Architect or Engineer and submitted for approval by the State Building Official. One set to be retained by DFCM, the other set to be given to the General Contractor and kept at the construction site.

# I. Pre-Construction Stage

# 1. General

- a. Each system or group of systems shall be integrated with other system components prior to release of the shop drawings by the A/E team and the Contractor team for construction. Pre-installation meetings are normally required for:
  - (1) Site and Infrastructure
  - (2) Facility Structure and Skin, including curtain walls and masonry.
  - (3) Building Systems (Mechanical, Electrical, Plumbing, Building Automation, Fire Alarm)
  - (4) Life Safety and Security Systems (Fire Protection, Fire Alarm, Security Electronics, Door Hardware)
  - (5) Roofing

# 2. Pre-Construction Meeting

a. DFCM's Designated Representative shall arrange for a preconstruction meeting. Shop drawing scheduling shall be coordinated so that the information is available for each discipline and trade to review and coordinate prior to the Pre-installation conference.

# 3. Pre-Installation Conference

a. During the pre-installation conference, the A/E team and the contractor team (all members required to coordinate a system or group of systems) shall meet and resolve any issues related to shop drawing coordination and RFIs.

b. Within 10 working days, after the pre-installation conference, responses to RFIs and construction modifications shall be issued by the A/E.

# 5.0 DFCM QUALITY ASSURANCE REQUIREMENTS

# 5.1 General

- A. DFCM has determined that many of the Quality Control problems can be reduced by a structured approach to interdisciplinary coordination and integration. The A/E shall integrate the drawings and specifications of all disciplines. The A/E shall inform DFCM of the process they will implement with the design team for dimensional control and comprehensive coordination of all elements of each of the following:
  - 1. Site Plan
  - 2. Floor Plan
  - 3. Reflected Ceiling Plan
  - 4. Exterior Elevations
  - 5. Selected Interior Elevations with cabinets or other types of complexity in the elevations.
  - 6. Sections at locations where above ceiling systems are congested shall delineate all building systems (e.g. Structural elements, Mechanical piping and ductwork, Electrical conduit and cable trays, and Fire Protection piping).
  - 7. Division 1 sections of the specifications.
- B. DFCM has determined that the functionality of systems can be improved and the costs reduced by the integration and convergence of building systems. The A/E shall implement a process with the design team for the comprehensive coordination of all elements. Elements that are typically a concern include:
  - 1. Communication Systems (structured cabling, audio-visual systems, other similar systems, and structured cabling connections to other electronic systems).
  - 2. Integrated Automation Systems (HVAC control, lighting control, electrical monitoring, monitoring of equipment, fire alarm).
  - 3. Security and Life Safety Systems (security systems, fire alarm systems, fire protection systems, door hardware, and similar systems).
  - 4. Equipment Connections (HVAC, electrical, plumbing).

# 6.0 COST MODEL REQUIREMENTS

#### 6.1 General

- A. The goal of the Cost Model Requirements is to provide clear criteria which the cost models and bids for a facility must meet to achieve DFCM's requirements for the project to be considered successful.
- B. The DFCM's Designated Representative shall define in the "Agreement between the DFCM and A/E" the Cost Model submittals required by the A/E. Unless otherwise indicated in the "Agreement Between DFCM and A/E," Cost Models are submitted at the following phases:
  - 1. Programming
  - 2. System Selection
  - 3. Schematic Design
  - 4. Design Development
  - 5. Construction Documents
- C. The A/E shall prepare a Cost Model at each phase of the Design which identifies a sub-cost model for each discipline. Based upon this Cost Model, the A/E with each of the Design Subconsultants shall summarize in the Cost Model narrative what can be constructed in accordance with the Cost Model. Document any variances that do not comply with the Design Process, Facility Program, or Agency Requirements. Prepare design document submittals that comply with the Cost Model.

On projects where a CM/GC has been selected the CM firm will be responsible for providing an additional cost estimate. The CM/GC and the design team must work together to reconcile any differences between the two cost estimates. The project may only proceed once the cost estimate is agreed upon.

- D. If the Steering Committee determines that the design for an element of the project does not comply with the project requirements, the cost model shall be adjusted and documented; however, the project budget shall not be exceeded.
- E. At each cost model submittal, the Cost Consultant (member of the A/E team) and/or Contractor shall independently review that the cost model for the A/E team shall not be exceeded based upon the narrative and supporting documents provided at each phase of the design.
- F. DFCM defines Construction Contingency as funds for unforeseeable conditions and design errors and omissions after the time of contract award. Reasonable allowance for all foreseeable work items must be made in the cost model.

## 6.2 Standards

- A. The Cost Model shall be prepared according to the Construction Specification Institute's uniform classification of construction systems and assemblies.
  - 1. RS Means is an acceptable source of cost information as long as it is adjusted to local market conditions and project requirements.
  - 2. Exception: a proprietary Cost Estimating data base may be utilized when validated by objective evidence and approved by DFCM's Designated Representative.

# **6.3** Cost Model Report Table of Contents

- A. Executive Summary
  - 1. Project Summary: Brief summary of overall project, including total square footage (current vs. program), net square footage (current vs. program), and space efficiency (current vs. program);
  - 2. Funding
  - 3. Total Construction Cost Model: Facility Cost (Lump Sum, Cost/gross sf), On-site Cost (Lump Sum, Cost/gross sf), and Off-site Cost (Lump Sum, Cost/gross sf);
  - 4. DFCM Furnished Cost Model (Lump Sum, Cost/gross sf);
  - 5. Delivery Method
- B. Project Narrative
  - 1. Site Narrative
  - 2. Facility Narrative
- C. Construction Cost Model summarizing costs in the following categories.
  - 1. Footing and Foundation
  - 2. Structural Core and Shell
  - 3. Exterior Cladding
  - 4. Interiors
  - 5. Mechanical
  - 6. Electrical
  - 7. Fire Protection
  - 8. Special Demolition
  - 9. Civil/Site Work
  - 10. General: General Conditions, Fee, Design Contingency, Escalation Contingency, Construction Contingency

- D. Assumptions and Qualifications
  - 1. Market Conditions
  - 2. Project Assumptions

# 6.4 Scope of Estimate

- A. Facility Program preliminary cost model requires a mixture of costs per functional space (such as office, classroom, etc.), cost per cubic foot, cost per square foot, and cost per linear foot (for items where the cost is not easily forecast by a cost per square foot model such as site utilities). In some cases, design options shall be selected to reduce the range of costs for the program. These design options shall be defined as assumptions.
- B. Schematic Design Cost model requires a mixture of cost per cubic foot, cost per square foot, and cost per linear foot (for items where the cost is not easily forecast by a cost per square foot model such as site utilities). The cost model shall be based upon the design options selected and other assumptions identified in the narrative
- C. Design/Development Cost model shall be developed based upon unit costs for approximate quantities of materials and installation shown on the design development documents or identified in the assumptions.
- D. Construction Documents Cost model shall be developed based upon unit costs for actual quantities of materials and installation shown on the construction documents or identified in the assumptions.

# 7.0 PROJECT MANUAL REQUIREMENTS

#### 7.1 General

- A. The Project Resource Manual published by The Construction Specifications Institute serves as a reference document covering a wide range of information required by those involved in the Facility Development Process. As a generic standard, it informs the A/E about industry-wide expectations which must be adapted to the constraints of the Design Process and to specific project requirements.
- B. Apply CSI MasterFormat 2004 for organizing the numbering of sections, the SectionFormat for the organizing individual sections and the PageFormat for each individual page. (Note: MasterFormat 1995 may be utilized for projects with A/E agreements dated before January 1, 2006.)

- C. The only parties to the construction contract are the DFCM and Contractor. The A/E shall therefore address all instructions to the Contractor. Do not address individual subcontractors or trades.
- D. Provide an orderly and logical arrangement by complying with the CSI requirements that establishes a standard location for specific information and to state that information only in that location.
  - 1. Index all documents in the Project Manual.
- E. Edit guide specifications carefully to convey the necessary requirements for each project discipline. Avoid elaborate and expensive requirements for items that are not critical to the success of the project. Delete from guide specifications irrelevant items. Modify guide specifications to add clarity and special requirements to conform to project requirements.
  - 1. Coordinate Project Manual with Drawings.
  - 2. Carefully coordinate Structural General Notes with the specifications.
  - 3. Do not use lump sum allowances in any specification sections.

#### 7.2 Preferred Source Documents

- A. DFCM requires written disclosure and project manager approval if specifications are prepared by a manufacturer. Manufacturer written specifications generally should not be used in order to avoid unfair influence by a manufacturer in the procurement process.
- B. DFCM requires that specifications be prepared in compliance with CSI requirements and that the specification masters be prepared using a documented quality process.
- C. DFCM does not require, but accepts the Full Language version of ARCOM Masterspec or BSD SpecLink Construction Specifications as the specification template. They are derived independently from the manufacturers and because they follow a quality and tested process.

# 7.3 Construction guarantees and warranties shall:

- A. Protect DFCM against faults, defects, or failure, in spite of technical compliance with the terms of the contract.
- B. Extend the manufacturer's responsibility beyond the end of the one year guarantee period on selected items as approved by DFCM.
- C. The one year guarantee period shall not limit the effect of warranties provided in or required by the contract. The Contractor shall correct failures during the one year guarantee period after substantial completion.

# 7.4 Product and Service Life Cycle Requirement:

- A. Assure there is a high value for the cost by:
  - 1. Maximize competition consistent with the purpose. In addition, minimize sole source procurements (Refer to <a href="http://www.rules.utah.gov/publicat/code/r023/r023-001.htm">http://www.rules.utah.gov/publicat/code/r023/r023-001.htm</a>). Provide a minimum of three manufacturers for each material or installation, except where authorization from the Director of DFCM has been obtained for sole source procurements. The use of an "or equal" clause in the specifications shall define a process for determining "equal products or services" which requires approval by the A/E and shall not leave it to the vendor to make this determination.
  - 2. In order to avoid excessive addition and replacement costs, use open source and open protocol systems when possible.
    - a. Where proprietary software and service organizations are required to service a component, obtain price information for DFCM and the Agency identifying the long term cost (10 years) in order to include this in the evaluation.
  - 3. Provide facility components which are durable, with low failure rates, and low cost to maintain.
  - 4. New Technologies: Reduce life cycle costs by incorporating proven technologies in facilities, and by performing "due diligence" prior to procuring new technologies.

#### 7.5 Materials

A. Specify materials which are new, unless approved by DFCM's Designated Representative. Provide certification or label with the name of the manufacturer or supplier and the approved testing laboratory where consensus based standards have been developed.

# **8.0 CAD REQUIREMENTS**

#### 8.1 General

A. The goal of the CAD Standards is to provide clear criteria which the Drawings for a facility must meet to achieve DFCM's requirements. Comply with the requirements of the National Cad Standard as supplemented by this standard.

- B. Coordinate with DFCM's Designated Representative to determine the drawing format
- C. The performance requirements are given as appropriate as minimum criteria to allow flexibility within the constraints of the CAD Standards. If a variance from the standard is desired, the approval of the DFCM's Designated Representative is required.

#### 8.2 Standards

#### A. CAD Standards

1. National CAD Standard, current version.

#### B. CAD Software

- 1. AutoCAD, current version
- 2. Microstation, current version

#### 8.3 Guidance

# A. Assumptions

- 1. Any CAD information that will be shared between multiple sheets, such as floor plans, should be contained in a separate CAD file. For AutoCAD the file would be an XREF.
- 2. All disciplines shall use the same title block for all drawings submitted for the same project. For AutoCAD, create the title block as an X-ref.

#### B. Other Design Tools

- 1. Isometric and perspective views may be used to supplement and explain the design.
- 2. Models and renderings may be used to supplement and explain the drawings.

# C. Quality of Drawings

- 1. These documents shall convey to all participants the graphic information necessary for the required work. It is essential that the documents be accurate and explicit.
- 2. All elements of the Contract Documents shall be properly coordinated to minimize conflicts between drawings and specifications.
- 3. Include the extent, size shape and generic types of materials, and the relationship to other materials.
- 4. Avoid duplication of items in Contract Documents. If items are duplicated, the A/E and Subconsultants shall carefully coordinate to prevent conflicts.

- 5. List all drawings in the index, including the cover sheet as the first sheet of the set.
- D. Project CD: A/E shall prepare Project CD that establishes the project setup for the other members of the A/E Team. Distribute Project CD at the kickoff meeting to all members of the project team. Include:
  - 1. Title Block
  - 2. Common CAD Layers
  - 3. Common Fonts
  - 4. Model Files, such as floor plans
  - 5. Sheet files including title block information that varies with each sheet.
  - 6. Initial sheet index

## 8.4 CAD Layer Guidelines - Supplemental Requirements

- A. Layer Name: Use Mandatory Level 1 Discipline Designator, Mandatory Major Group, Optional Minor Group.
- B. Identify user-defined layers using standard alphanumeric format.

# 8.5 Uniform Drawing Standards - Supplemental Requirements

- A. Drawing Set Organization
  - 1. Reference the border/title block and model files into a sheet file.
  - 2. Include a "ready-to-plot" sheet tab for both full size plotting and reduced size plotting.
  - 3. File Naming Convention: DFCM's preference is to use two character discipline designators. One character discipline designators may be used for sheets that apply to all the drawings in a discipline or if the project is small. For small projects, the use of one character discipline designators must be approved by DFCM's Designated Representative for the project.

#### B. Sheet Organization

- 1. Use a common sheet size for all sheets for a specific project to facilitate filing hard copy documents, plotting capabilities, and to maintain a consistency for Facility Management users. Use Architectural Standard "D size" (24" X 36") or "F size" (30" X 42").
- 2. Obtain written approval, prior to submitting sheets that vary from this standard, from the DFCM's Designated Representative. Request shall be in writing and include a justification for the variance.

## 3. Sheet Margins:

Sheet Margins	
Top and Bottom Margin	1/2"
Left Margin	1-1/2"
Right Margin	3/4"

- C. Schedules: Comply with National Cad Standards Module 03.
- D. Drafting Conventions: Comply with Drafting Conventions Module 04
  - 1. AutoCAD users should choose either the architectural (feet and inches) or engineering (feet and tenths).
  - 2. Global Origin: The origin of a drawing file is important because it serves as the point of reference from which all other elements are located. Origins are typical defined (located) in a drawing file by the Cartesian coordinate system of x, y, and z or for AutoCAD users 0, 0, 0.
  - 3. Title Block: For DFCM projects the title block area will be placed on each sheet in the NCS horizontal text format with the title block placed in the right hand margin of the border sheet. DFCM requires additional information in the standard blocks of the NCS format using a horizontal layout. Utilize the DFCM provided cover sheet template.
  - 4. All revisions to the Contract Documents shall be accomplished using the delta symbol placed adjacent to the revised element with the most current revision number. The portion revised shall be clouded on the drawings encompassing the delta symbol. Only the current revisions shall have the clouded area depicted. Previous revision delta symbols shall remain, but the clouded line shall be erased or frozen. If an entire drawing is revised or a new drawing is added to the set, place the revision delta in the issue block. Include revision block with change order numbers, dates and descriptions.
  - 5. Text/Fonts: For drawing content, use standard fonts provided with the CAD software. If specialty fonts are used in the title block, provide specialty font to DFCM.
  - 6. Scale: Scale shall be expressed both numerically and graphically. For building project plans, use 1/8" or ½" scale, unless approved otherwise by DFCM's Designated Representative. Large scale views may use standard scales larger than ½". For Site plans, use 1/1, 1/10, 1/20, 1/30, 1/40, 1/50, 1/60, or 1/100 scale, unless approved otherwise by DFCM's Designated Representative.

- 7. Sheet Types: Comply with the requirements of the sheet types section of this module. Comply with the descriptions of requirements for plans generated by each discipline.
- E. Terms and Abbreviations: Comply with Terms and Abbreviations National Cad Standards Module 05.
- F. Symbols: Comply with the Symbols Module 06. Standard symbols ensure clear and concise communication.
  - 1. Exception No. 1: Lighting fixture symbols may be added to the symbol list which more graphically describe the lighting fixture, if identified on the symbol schedule.
  - 2. Exception No. 2: Fire alarm symbols that comply with NFPA 170 are preferred.
- G. Notations: Comply with Module 07.
- H. Code Conventions. Provide the code information as required in the design process and in the DFCM cover sheet templates.

# **SECTION III - APPENDIX G** This Appendix contains Sivogah Road and Intersection Design Requirements (per Draper City's Standards).





# **End of Proposal**

Design/Build RFP **Driver License Division & Department of Motor Vehicles Joint Facility**Draper, Utah

DFCM No. 07037550